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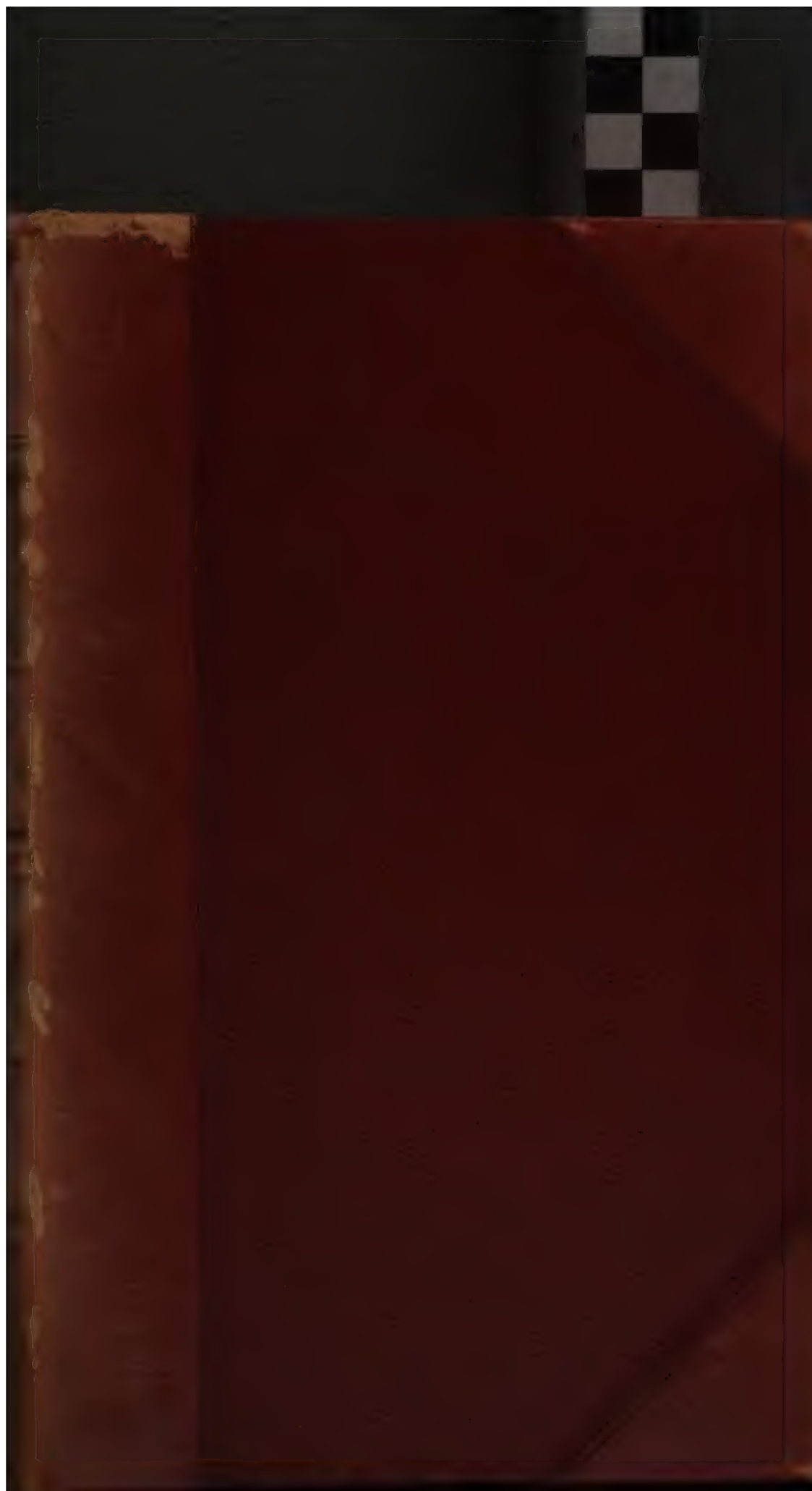
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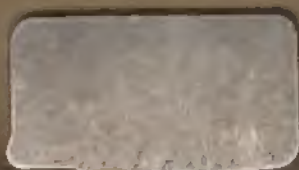
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LELAND STANFORD JUNIOR UNIVERSITY



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JOURNAL

OF

THE ROYAL ASIATIC SOCIETY.

ART. I.—*Vajra-chhediká*, the “*Kim Kong King*,” or *Diamond Sûtra*. Translated from the Chinese by the Rev. S. BEAL, Chaplain, R.N.

[Presented December, 1863].

True words (Dhárani) to be used for cleansing the mouth previous to a perusal of this work.

| | |
|---------------------------|-------------|
| Seou-li Seou-li | [Śrī Śrī.] |
| Ma-ha Seou-li | [Mahā Śrī.] |
| Seou-seou-li | [Sau Śrī.] |
| Sab-po-ho | [Svab.] |

True words (Dhárani) (fit for) the pure condition of Being.
Om' Lam!

Afterwards follow eight invocations to the different Vajras.

This work belongs to a class of Buddhist books called *Prajñā Páramitá*. It was translated first into the Chinese by Kumára-jíva (A.D. 405), who was brought into China from Thibet. “The King of Tsin had sent an army into that country with directions not to return without the Indian whose fame had spread amongst all the neighbouring nations. The former translations of Buddhist works were to a great extent erroneous. To produce them in a form more accurate and complete was the task undertaken by Kumára-jíva. More than eight hundred priests were called to assist him; and the king himself, an ardent disciple of the new faith, was present at the conference, holding the old copies in his hand as the work of correction proceeded. More than three hundred volumes were thus prepared.” (Edkins).

Most of these works were afterwards re-translated by Hiouen Thsang: his version, however, of the work we are now considering is not so commonly used in China as that by Kumára-jíva.

A translation of this Sútra from the Mongolian has been published by M. Schmidt. I have not had an opportunity of comparing it with the Chinese.

The work is divided into thirty-two sections, each of which has a distinct title and subject of discussion.

Cap. I. relates the circumstances under which the religious assembly was convoked, and from that shows how the discussion arose.

Thus have I heard.¹ Upon a certain occasion Buddha was residing in the city (country) of Śrávastí, occupying the garden which Gida,² the heir-apparent, had bestowed on the compassionate (Sudana).

Here, then, was Buddha, surrounded by all the multitude of the great Bhikshus (religious mendicants, the general title of Buddha's followers), 1250 in number. Then the world-honoured one, it being now the time of providing food, having put on his robe, and taken his alms-bowl, entered the great city of Śrávastí, for the purpose of begging a supply.

Having gone in order through the midst of the city, begging food in a regular manner, he now returned to his former retreat, where, having eaten the food he had received as alms, and having laid aside his robe and alms-bowl, he washed his feet, and then, arranging his seat, he sat down.

Cap. II. contains the respectful request of the aged Subhúti.³

At this time the distinguished and venerable Subhúti sat in

¹ This is the well-known phrase, "evam mayá śrutam," concerning which Bournouf has a note (Lotus, p. 286). I will observe here that the phrase in question was probably introduced by the compilers of the Buddhist Sútras in order to give these writings the same degree of sanctity which belongs to the Bráhmaṇas and Mantras, as forming the "Ś'ruti," or Sacred Revelation of the followers of the Vedas.—*Vide* Max Müller, Hist. of Sansc. Lit., p. 75.

² For a full account of this garden, *vide* S. Hardy, M. of Bud., p. 218. [Hardy gives the name of the prince as "Jeta," and the garden is called "Jeta-vana." Bournouf Int. 22.—Ed.]

³ Subhúti is in Chinese "Virtuous presence."

the midst of the assembly. Then rising forthwith from his seat, he uncovered his right shoulder, and with his right knee knelt on the ground; then closing together the palms of his hands, and raising them in a respectful manner to Buddha, he spoke thus: Oh! much-desired! world-honoured one! Tathágata ever regards and illustriously protects all the Bodhisatwas! he ever rightly instructs them!

World-honoured one! if a virtuous disciple, male or female, aspire after (the attainment of) the "unsurpassed, just, and enlightened heart,"¹ say on what ought that disciple to fix his reliance, say how ought that disciple to repress and subdue the evil emotions of this sinful heart.²

Buddha said: Good! good! (sádhu). Subhúti! it is as you say. Tathágata is ever mindful of and illustriously defends all the Bodhisatwas, and he ever instructs them in right. You therefore listen now and examine well what, for your sake, I declare. The worthy disciple, whether male or female, who aspires after the attainment of the perfectly just, unsurpassed, and enlightened heart, ought to rely on what I shall now explain, ought to subdue the risings of his corrupt heart in the way I shall now exhibit!

Ah! yes, world-honoured one! would that you would so far gratify us all, anxious to hear.

Cap. III. exhibits the true distinctive character of the Great Vehicle.

Buddha said: Subhúti, all the Bodhisatwas and great Bodhisatwas ought thus to subdue and repress the risings of this corrupt heart. Whatever species of creature there be, whether oviparous or viviparous, born from spawn or by transformation, possessing a material form or not, liable to the laws of mind or not, not altogether possessed of mental organization nor yet entirely without it—all these I command and exhort to enter on the state of the unsurpassed Nirváṇa (Pari nirváṇa³) and for ever to free themselves from the conditions of being to which they severally belong. The great

¹ Anuttara samyak sambodhi hridaya.

² That is, the natural heart.

³ Vide Julien ii. 390.

family of sentient beings, immeasurable, vast, numberless, being thus freed from such states of existence, then indeed there will be no longer any such beings to arrive at this position of perfect freedom.

I conclude, therefore, Subhúti, if there be a Bodhisatwa affected with any selfish distinction, or any social distinction,¹ or any distinction as a sentient being, or any distinction as a finite and perishable being, then this Bodhisatwa is not one in reality.

Cap. IV.—The characteristic of the most perfect line of conduct, is, that it is spontaneous.

Moreover, Subhúti, a Bodhisatwa in the active discharge of his functions ought to be without any object of reliance or desire (i.e., unaffected by any secondary object in the discharge of his chief business). When occupied, for instance, in attending to the work of charity—his ought to be that charity which is called "unmixed with any material consideration"—he ought to distribute his alms without relying on (or, having any reference to) any sensible gratification, whether it be of sound, or odour, or taste, or touch, or thought.

Subhúti, a Bodhisatwa ought thus to discharge the work of almsgiving, relying on no sensible distinction whatever. What then! if a Bodhisatwa be thus charitable, having no reliance or reference, his consequent happiness must be immeasurable and boundless. Subhúti! what think you? Can the eastern region of space be measured by a line?

No, certainly, world-honoured one!

Subhúti, can the western, or southern, or northern regions of space be measured? or the four midway regions of space (i.e., N.E., S.E., S.W., N.W.), or the upper and lower regions: can either of these be accurately measured or defined?

¹ These four distinctions (lakṣhaṇa) are constantly referred to in this Sūtra as the "four Canons," or "Rules." The idea seems to be this: if a man so destroy all marks of his individual character as to act without any reference to himself, or men, or other states of being, or continuance in the condition of a living creature, then he has arrived at the desired state of non-individuality, and must be lost in the ocean of Universal Life. This is the *Pari nirvāṇa*, the condition of absolute rest—the desired repose of the Buddhist disciple.

No, certainly, world-honoured one!

Subhūti, the consequent happiness of the Bodhisatwa, who discharges his charitable impulses in the distribution of alms without any reliance or secondary object whatever: his happiness, I say, is likewise boundless and immeasurable. Subhūti, a Bodhisatwa ought to rely on nothing whatever, except this principle of my doctrine.

Cap. V.—Regarding only the immaterial principle, we behold things in their true light.

Subhūti, what is your opinion? Is it possible by any bodily distinction to behold Tathāgata?

No, certainly not! world-honoured one! it is not possible to obtain a view of Tathāgata by the medium of any bodily distinction or quality whatever. What then? That which Tathāgata speaks of as a quality of the body, is after all a quality of that which is no real body (and therefore itself unreal).

Buddha said: Subhūti, all that which has qualities or distinctions, all this is empty and unreal; but if a man beholds all these qualities as indeed no qualities, then he can at once behold Tathāgata.

Cap. VI.—The precious character of true faith.

Subhūti now addressed Buddha thus: World-honoured one! with reference to the mass of sentient beings who may hereafter be privileged to hear the words contained in the former sections: will these words produce in them a true faith?

Buddha said: Subhūti, speak not after this manner. (For) after the Nirvāna of Tathāgata, though five hundred years be elapsed, should there be one who, by keeping the moral precepts, prepares himself for the happiness consequent on such conduct, that man no doubt by these former sections of my doctrine will be able to arrive at a true faith. Supposing such a man to have truly arrived at this condition, you should know that the seeds of virtue which have been sown in his mind were

implanted not by one Buddha, or even two or three, or four or five, but having these seeds of virtue sown within him by the teaching of countless thousands of Buddhas, and then hearing these sections, reflecting but a moment, the true faith dawns on his heart. Subhúti! Tathágata knows entirely, and entirely perceives, that all this mass of sentient beings shall obtain (in the manner I have described) immeasurable felicity. And why so? but because they will thus be freed from all selfish distinctions and worldly desires, and distinctions as perishable beings, and distinctions as finite beings; they will have no distinction either as beings possessed of mental organization, nor as beings without such an organization. What then? All this mass of sentient existences, if their heart be possessed of any such distinction, they immediately place their dependence on some object agreeable to this distinction; or, if they be possessed of any such mental distinction, what is this but coming under the same necessity? And more than this, if they take hold of the fact of their having no distinction as a mentally-constituted being, they then also bring themselves under the same necessity of dependence. So (it is the case that) we should neither rely on anything real or unreal (literally, on that which is a law or on that which is not a law). Tathágata has ever spoken thus: "Ye Bhikshus, know ye well that my law is as it were but a raft to help you across the stream. The law, then, must be forsaken; how much more that which is no law!"

Cap. VII.—The state of perfection cannot be said to be obtained, nor can it be described by words.

Subhúti, what think you? Has Tathágata obtained the condition of the unsurpassed, just, and enlightened heart? Or has Tathágata any law which can be put into words by which this state may be attained?

Subhúti answered and said: As I understand the system which Buddha is now explaining, there can be no fixed and unchangeable law (*i.e.*, condition), as that which is called the unsurpassed, just, and enlightened heart; and so there can be no fixed law which can be expressed in words by Tathágata.

Hence it seems that the various systems which have been explained by Tathágata can none of them be comprehended within fixed limits, or dogmatically explained; they cannot be spoken of as, "not a system of law," nor yet as the opposite of that which is "not a system."

So it appears that all the sages and wise men who have lived, have all adopted this mode of diffusive doctrine [doctrine which admits of no particular distinction (wou-wei)], and hence the differences which have occurred.

Cap. VIII.—All former systems whatever have sprung from this.

Subhúti! what think you, if there was a man who distributed in alms sufficient of the seven precious substances to fill the whole of the great chiliocosm, would his merit and consequent reward be considerable or not?

Subhúti said: Very considerable indeed, world-honoured one! But why so? this merit being in its very character of the nature of that which is no merit at all, so Tathágata speaks of it as being "much."

(Buddha resumed): If there be a man who receives and adopts the principles of this Súra up to the point of the four sections,¹ I say on that man's behalf, that his merit is much greater than the other's. What then, Subhúti? all the Buddhas, and all the perfect laws of the Buddhas, have sprung from (the principles of) this one Súra; but, Subhúti, that which is spoken of as the law of Buddha, is after all not such a law (or, is a law of no-Buddha)

Cap. IX.—The only true distinction is that which is not to be distinguished.

Subhúti, what think you? is the Śrotápatti able to reflect thus with himself: "I shall now obtain the fruit of having entered this first path of a Śrotápatti?"

Subhúti said: No, world-honoured one! And why? this word Śrotápatti is a mere phrase, which signifies "once entered the stream," and after all there is nothing to enter; for

¹ That is, the four rules of non-individuality.—*Vide ante*, cap. iii.

he cannot enter on that which comes under the category of form, or sound, or odour, or taste, or touch, or thought. This term, then, Śrotápati, is a mere word, and no more.

Subhúti, what think you? is the Sakṛid-ágámí able to reflect thus with himself: "I shall now obtain the fruit of having entered on this second path of a Sakṛid-ágámí?"

Subhúti replied: No, world-honoured one! And why? this word Sakṛid-ágámí signifies "one more return to life," and there is in truth no going or returning. This term, then, is but a mere name, and no more.

Subhúti, what do you think? is the Anágámí able to reflect thus with himself: "I shall now obtain the reward of having entered the third path of an Anágámí?"

No, certainly not! Subhúti said; for why? world-honoured one! this term Anágámí is but a word signifying "no further return," and there is not in truth such a thing as "not returning." This word, therefore, of Anágámí, is but a mere name, and nothing more.

Subhúti! what think you? can an Arhat reflect thus with himself: "I shall now obtain the condition of a Rahat?"

Subhúti said: No, world-honoured one! And why? Because there being no longer any active principle which can affect the Rahat, this name of Rahat is now only an empty word. World-honoured one! if a Rahat were to indulge this thought, "I shall now obtain the position of a Rahat;" then he would immediately subject himself to one of the four distinctive characters of individuality (and be no longer a Rahat). World-honoured one! when Buddha declared that I should attain the power of Samádhi,¹ which is opposed to all bitterness, and is accounted the most excellent attainment, and corresponds to the most exalted position of a Rahat, world-honoured one, I did not then reflect that I should obtain this eminent condition. World-honoured one! if I had so reflected "that now I shall attain the position of a Rahat," the world-honoured one would not then have said, "Subhúti, what is this but the name of the one who

¹ The latter portion of this cap. is very obscure. I offer this translation with diffidence.—S. B.

delights in the mortification of an Aranyaka (forest devotee)," regarding "Subhúti" as in truth not acting at all, but as a mere name, then (in such forgetfulness of self) "he is one who delights in self-mortification."

Cap. X.—Complete perfection lies in the heart purified and enlightened.

Buddha addressed Subhúti thus: How think you, when Tathágata in old times was present at his nomination by Dipankara Buddha; had he then, by means of any active exertion, attained ought towards this distinction? No! world-honoured one! when Tathágata lived in the time of Dípankara Buddha, and was present at the transaction referred to, he had attained nothing by any mere ritual observance. Subhúti, what think you? are the various lands and territories of the Buddhas completely perfected by the Bodhisatwas who occupy them? No! world-honoured one! for this complete perfection of which we speak is after all no perfection at all, it is only an empty name.

So, Subhúti, all the Bodhisatwas and great Bodhisatwas ought to strive after the possession of a heart perfectly pure and spotless, and not after any material or sensible adornment; or a heart depending on such adornment; whether it be of sound, or odour, or taste, or touch, or thought, they ought to have no such dependence as this, and being without reliance, to make their dependence on the fact of their being so. Subhúti! suppose for instance there was a man whose body was as large as the Royal Summeru. What do you suppose—would such a body be a large one or not?

Subhúti replied: Very great indeed, world-honoured one! But what then? Buddha is speaking of that body which is the opposite to the material body, that, indeed, may well be named Great.

Cap. XI.—The inestimable excellence of complete inaction (or complete indifference in action).

Subhúti, suppose there were as many Rivers Ganges as

the sands of the Ganges, would the sands of all these rivers be numerous or not?

Subhúti said: Very numerous indeed, world-honoured one! Even the rivers themselves would be numberless, how much more the sands of all these rivers?

Subhúti, I now say to you: Verily if there be a disciple, male or female, who were to distribute in alms as much of the seven precious substances as would fill as many great chiliocosms as there are sands in all the rivers above described, would his merit be great or not?

Subhuti said: Very great, world-honoured one!

Buddha replied: And yet if there were a disciple, male or female, who in the perusal of this Sútra advanced so far as to accept and appropriate the four canons (laid down in the former chapter), I declare on his behalf that his merit and happiness in consequence, would far exceed that of the former disciple.

Cap. XII.—The honour and respect due to the true doctrine.

Moreover, Subhúti, in repeating this Sútra in due order, and having come to the part in which the four canons are laid down, you should know that at this point the whole body of Devas, men and asuras, ought with one accord to bring their tribute of worship, as to a temple or Stúpa. How much more then if there be a man who is able completely to believe and receive the whole Sútra and to recite it throughout. Subhúti, know that this man has acquired knowledge of the most excellent and desirable of all laws; and if the place where this Sutra is recited be worthy of all honour as the place of Buddha himself, so also is this disciple honourable and worthy of the highest respect.

Cap. XIII.—Relating to the character in which this system should be received by men.

At this time Subhúti addressed Buddha, and said, World-honoured one, by what name ought we to accept and adopt this Sútra?

Buddha replied, The name of this Sútra is "Kin-kong

Poh-yo po-lo-mih" (Vajra-chhediká párami); by these words you ought to receive and adopt it.

But what then, Subhúti? Buddha declares that this "Kinkong Poh-yo po-lo-mih" is after all not any such thing; that this title is a mere name.

Subhúti, how do you suppose? Has Tathágata any law which can be included in so many words?

Subhúti answered Buddha: World-honoured one, Tathágata has no such law.

Subhúti, what think you? as many minute particles of dust as there are in the great chiliocosm, are there many or not?

Subhúti answered, Very many, world-honoured one!

Subhúti, all these countless particles of dust Tathágata declares are no real particles; it is but an empty name by which they are known. Tathágata declares that all these systems of worlds composing the great chiliocosm are no real worlds; they are but empty names.

Subhúti, what think you? is it possible by regarding the thirty-two distinguishing marks to behold Tathágata?

No, world-honoured one! it is not possible to behold Tathágata by means of the thirty-two distinguishing marks.

For why? Tathágata declares that these thirty-two distinguishing marks are no real distinctions after all, that they are but mere names.

Subhúti, if there be a virtuous disciple, male or female, who should offer body and life in a work of charity, as many times as there are sands in the Ganges; and if, on the other hand, there be a man who receives and adopts the principles of this Súra up to the point of the four canons; on account of this man, I declare his merit is very great, and in point of number vast indeed.

Cap. XIV.—Removing all distinctive qualities, eternal rest and freedom is obtained.

At this time Subhúti hearing this doctrine thus delivered, earnestly desiring a complete explanation of the system, deeply moved even to tears, addressed Buddha thus: Oh! thou much-desired, world-honoured one! the deep mysterious

doctrine which Buddha has now delivered, I, from days of old, when I first obtained the eyes of wisdom, have never yet heard equalled. World-honoured one ! if we suppose a person to have heard this system, and with a believing heart, pure and calm, to have received it, then in that man is produced the true distinction, and we may then know that he has obtained merit, unequalled in character, to be desired above all things. (But) world-honoured one ! this true distinction of which I spoke is after all no real distinction, and even of this Buddha declares that it is a mere name. World-honoured one ! I having now heard the doctrine thus explained, understanding and believing the interpretation of it thus, accept and adopt it. I halt not at any difficulties ; but if in future years, after the lapse of five centuries or more, all these countless sentient creatures having likewise heard this Sûtra, and believing its interpretation, accept and adopt it, these men likewise shall attain the unequalled and much to be desired condition (of merit before alluded to). And why so ? but because these men are affected by neither of the four distinctive qualities, whether of self, or men, or worldly desire, or long life ; but from this it follows that this very distinction of self is the same as no distinction, and so with the rest also, they are unreal, and not to be considered except as names. So that a man, getting rid of all such distinctions, arrives at the condition of what is called "the state of all the Buddhas."

Buddha replied : Subhúti, you are right, you are right !

But if again there be a man who hears this system of doctrine, and be neither affected by pride, or fear, or bewilderment, this man also, be it known, has attained the much desired condition before alluded to. What then, Subhúti ? Tathágata declares that the first Páramitá (of charity) is no real Páramitá ; this also is a mere name. And as to the Páramitá of Patience, Tathágata declares that this also is no Páramitá ; it is but an empty name. What then, Subhúti ? in old time, when I was King of Koli, and my body was cut up and mutilated (or when my body was mutilated by the King of Koli), I at that time was without either of these

four distinctive qualities of individuality; and again, when I, in old time, was cut up piece by piece, limb by limb, if I then had possessed either of these four distinctive qualities, then surely I should have experienced some degree of anger or resentment. Subhúti, again when, in old time, five hundred generations since, I was the Rishi Kshánti (or a Rishi practising the Kshánti Páramitá), at that time I was not subject to either of these before-named distinctive qualities. Know this therefore, Subhúti, a Bodhisatwa ought to get rid of all these individual distinctions, and in aspiring after the unsurpassed, just, and enlightened heart, he ought to rely on no earth-born principle, he ought to rely on no disposition founded on either sound or odour or taste or touch or thought, he ought to depend only on having no dependence, for if the heart once learns to depend, then it has no real strength. Hence Buddha declares that the mind of the Bodhisatwa ought not to rely on any formal act of charity. Subhúti, the Bodhisatwa ought to distribute his almsgiving for the purpose of benefitting the whole mass of sentient creatures, and yet Tathágata declares that as all dependencies are after all no real subjects of dependence, so also he says that all sentient creatures are not in reality what they are called.

Subhúti, Tathágata's words are true words, real words, literal words, not wild or contradictory ones. Subhúti, the condition of Being to which Tathágata has attained, this condition is neither really capable of description, nor yet is it wholly unreal. Subhúti, if the heart of a Bodhisatwa rely upon any condition or active principle whatever in the discharge of his charitable labors, he is like a man entering into a dark place in which nothing can be seen, but if a Bodhisatwa do not rely on any active purpose whatever in the distribution of his alms, he is like a man with his eyes open, and the brightness of the sun around him, he sees clearly every form and every object. Subhúti, in future ages, if there be a disciple male or female, who is able to read through the whole, and accept and adopt the whole of this Sûtra, he is then the same as Tathágata himself. Buddha, by his supreme wisdom, clearly knows and clearly sees that

this man; arrived thus at complete perfection, derives boundless and immeasurable merit.

Cap. XV.—The redundant merit derived from an adoption of this system of doctrine.

Subhúti, if there be a disciple, male or female, who during the three portions of the day deliver in charity as many lives as there are sands in the Ganges, and proceed thus through a space of an asankhya of kalpas, ever offering up his life and body in alms, and if on the other hand there were a man who on hearing this system of doctrine, receives it into a believing heart, without any doubt or reservation, the happiness of this man is far superior to that of the other, how much rather if he receive and adopt this written doctrine, read and study it and expound it to man.

Subhúti, it is indeed the case that this Sútra contains a method which cannot be completely fathomed, it cannot be compared to anything which has been hitherto spoken, its distinguishing merit is without bounds. Tathágata, on behalf of those aspiring to the Great Vehicle, and those affecting the Highest Vehicle, says, if there be a man who is able to receive and adopt this Sútra and repeat it throughout and declare it generally amongst men, Tathágata clearly sees, clearly knows, all these having arrived at perfection shall attain merit without bounds, incomparable, not to be fathomed. Thus it is, all men being one with Ho-Tan (Gautama?), Tathágata, arrive at the state of the unsurpassed, just, and enlightened (heart). Moreover if a man delights in an inferior system (the Little Vehicle), relying on one of the four individual distinctions, he cannot receive and adopt, or study or proclaim this Sútra.

Subhúti, wherever it be that this Sútra [is thus read and proclaimed], all men, Devas and Asuras ought to bring their offerings, ought to apprehend that such a spot is as sacred as that where a Stúpa is erected, all ought to worship here with respect, to bring their flowers and incense, to scatter them around this locality.

Cap. XVI.—Being once pure, all the power of Karma¹ is past.

Moreover, Subhúti, if there be a disciple, male or female, who having received and adopted this Súra reads it throughout, if on account of his evil Karma produced by his sins in former births, he be now born as a man of poor degree and unhappy circumstances, or having entered one of the three evil degrees of birth, he be now born poor and miserable as a man, all the evil Karma resulting from his former sins, shall now be for ever destroyed, and he himself be enabled to attain to the unsurpassed, just, and enlightened heart.

Subhúti, I remember countless ages ago, before Dípankara Buddha having met with infinite myriads of Buddhas, who were all engaged in performing the external duties of religious service, deceived by the belief of the reality of things around them; but if there be a man, who in after ages is able to accept and recite this Súra throughout, the merit which he will thus attain to, shall infinitely exceed that which formal attention to religious observances will secure, so much so that to draw any proportion between them would be impossible, and incredible were it to be stated; for as the method and entire meaning of this Súra is not to be described or entirely conceived, so the merit and happy consequences of accepting it, cannot be conceived or described.

Cap. XVII.—Having arrived at the perfection of wisdom, there is no individuality left.

At this time Subhúti addressed Buddha thus: World-honoured one, if a disciple, male or female, aspire after the attainment of the unsurpassed, just, and enlightened heart, say, on what ought that disciple to ground his reliance; by what means ought he to destroy and suppress *this* evil heart?

Buddha replied: Subhúti, if a disciple, male or female, aspire after the unsurpassed, just, and enlightened heart, he ought to beget in himself this disposition [and say], "I must now destroy and get rid of all the principles of life in whatever creature they exist, all creatures being, as far as I am

¹ I adopt the word "Karma" from Spence Hardy; the Chinese (*nuk*) has a similar meaning.

concerned, thus destroyed and got rid of; then, in truth, there will be no longer any such thing as getting rid of all such creatures." So then, Subhúti, if a Bodhisatwa still be affected by any individual distinction, such as the following: I will strive after so and so because "it seems agreeable to me," or because "men approve of it," or because "it is the best reward for a sentient creature," or because "it entails endless duration of life," such a Bodhisatwa, I say, is not a true Bodhisatwa, wherefore it is plain, O Subhúti, that there is, in reality no such condition of being as that described as the unsurpassed, just, and enlightened heart.

Subhúti, what think you? did Tathágata possess one fixed law of action when he attained in the days of Dípankara Buddha the condition of the unsurpassed heart?

No! world-honoured one! as I at least interpret the doctrine of Buddha, then Buddha had no fixed rule of action when in the days of Dípankara Buddha he attained the unsurpassed, just, and enlightened heart.

Buddha said: Right! Right! Subhúti, there is in truth no fixed law [by which] Tathágata attained this condition. Subhúti, if there had been such a law then, Dípankara Buddha would not have said in delivering the prediction concerning me, "You in after ages must attain to the state of Buddha, and your name shall be Sákyamuni," so that because there is indeed no fixed law for attaining the condition of "the perfect heart," on that account it was Dípankara Buddha delivered his prediction in such words. What, then, the very word "Tathágata" is the explanation as it were of all systems of law. If a man say, "Tathágata has arrived at the condition of the perfect heart," [and hence conclude that there is a fixed method by which he has so arrived, this is erroneous] Subhúti, in truth there is no such fixed law. The condition of the unsurpassed heart to which Tathágata has arrived, is thus a medial one, neither wholly real nor wholly false, hence Tathágata declares that all things¹ are but con-

¹ The Chinese expression "Yih tsai fah," (in the text) corresponds to "Yé dhammá" in the well known Gáthá,—

"Yé dhammá hétuppabhawá," etc.

vide Spence Hardy's Manual of Buddhism, p. 196, and Jour. R.A.S., vol. xvi. p. 37.

ditions of being existing in Buddha himself. Subhúti, what men call "all things," is in fact just the contrary (*i.e.* no-things); such things are only mere names. Subhúti, it is as though there were a man with a very great body. Subhúti said: "World-honoured one! Tathágata speaks of a man's body as great, but this idea of greatness is but a mere name, it is just the opposite of a reality." Subhúti, so it is with the Bodhisatwa, if he should say "I ought to destroy all recollection of the countless kinds of creatures," this Bodhisatwa would not be really one, but only a nominal one. What then, Subhúti, there is in reality no fixed condition of being, and when this is the case, then a man is really a Bodhisatwa. Hence Buddha says that all things ought to be without any individual distinction. Subhúti, if a Bodhisatwa should say thus, "I ought to adorn the land of Buddha" (*i.e.* I ought to practise all the Pâramitás and other meritorious observances, in order thoroughly to exhibit in myself the excellences of a Bodhisatwa), this Bodhisatwa ought not to be called one. For Buddha declared that this adornment is after all not any adornment, it is a mere name. Subhúti, if a Bodhisatwa completely gets rid of the idea of individuality, then this Bodhisatwa is one in reality and truth.

Cap. XVIII.—When all things are brought to their one true state of being, then there can only be one method of knowledge.

Subhúti, what think you? does Tathágata possess human power of sight?

Yes, certainly, world-honoured one! Tathágata possesses this power.

Subhúti, what think you? has Tathágata the power of sight peculiar to Devas?

Yes, certainly, world-honoured one! Tathágata possesses this power.

Subhúti, what think you? does Tathágata possess the eyes of wisdom?

Yes, certainly, world-honoured one! Tathágata possesses this power.

Subhúti, what think you? does Tathágata possess the eyes of the law?

Yes, certainly, world-honoured one! Tathágata possesses this power.

Subhúti, what think you? does Tathágata possess the eyes of Buddha?

Yes, certainly, world-honoured one! Tathágata possesses this power.

Subhúti, what think you? as many sands as there are in the Ganges can Buddha declare (the number of these sands) (or, does Buddha say that these are [real] sands)?

Yes, world-honoured one! Tathágata declares [the number of] these sands.

Subhúti, what think you? if there were as many rivers Ganges as there are sands in the Ganges, would the sands of all these rivers be considerable or not? and if there were as many chiliocosms as there are sands, would these be numerous?

Very numerous indeed, world-honoured one!

Buddha said: As many sentient creatures as there are in all these numerous worlds; if there were as many different dispositions (or hearts) as there are creatures, Tathágata nevertheless distinctly knows them all, and he says that all these different dispositions are after all none at all in reality, and that they are mere names.

Wherefore, Subhúti, the various dispositions that have existed in relation with things past, present, or future, are all unsubstantial and unreal.

Cap. XIX. treats of the universal diffusion¹ of the mystical body [of Tathágata.]

Subhúti, what think you? if there were a man who in the practice of his charity were to bestow in alms enough of the seven precious substances to fill the great chiliocosm, would the merit which this man obtained by the consequent influences of such charity be great or not?

¹ *Dharmadhātu*, i.e. "universally diffused essence," called dharma.

Yes, certainly, world-honoured one! the effect of such charity would be very considerable in its consequent merit.

Subhúti, if that merit and happiness consequent on it, were real merit and happiness, then Tathágata would not describe it as being "great:" it is when the happiness is in reality vain and transitory that Buddha speaks of it comparatively as "much" or "great."

Cap. XX.—On the removal of all material forms and all distinctive qualities.

Subhúti, what think you? Is it possible to behold Buddha through the outward distinctions of his perfectly fashioned body? No, world-honoured one! Tathágata is not to be seen through the medium of any such distinctions as these. And why? Tathágata declares that all such distinctions are after all no real distinctions; this term perfectly-fashioned-body, is nothing more than a mere name.

Subhúti, what think you? is it possible to behold Tathágata in any of the various changes which his body may be made to undergo (i.e. his spiritual transformations)?

No, world-honoured one! Juloi must not thus be sought for. What then—Tathágata declares that all these various changes and appearances are after all unreal—by whatever terms they are known they are but mere names.

Cap. XXI.—On the impossibility of expressing this system in words, that which can be so expressed is not agreeable to this body of doctrine.

Subhúti, be mindful not to speak after this manner, "Tathágata has this intention in his heart, viz., 'I ought to have a definitely declared system of doctrine,'" never think thus. For why, if a man say that Tathágata has a definitely spoken system of doctrine, that man does but malign Buddha, for the law which I give cannot be explained in words. Subhúti, as to a definitely declared system of law, that which can be thus declared is no law, it is but an empty name.

At this time the aged sage Subhúti addressed Buddha thus: World-honoured one! will the mass of sentient beings who

in future years may listen to this law, will they hereby have begotten in them a believing heart? Buddha said: Subhúti, that mass of sentient beings, of which you speak, in one sense is real, and in another is unreal. But what then, Subhuti? the mass of sentient beings, born of sentient beings, Tathágata declares are no such beings at all; the term "sentient beings" is but a name.

Cap. XXII.—It is wrong also to say that this system or condition of being can be attained to.

Subhúti addressed Buddha thus: World-honoured one! Buddha having arrived at the condition of the unsurpassed and perfect heart, is he in the condition which has previously been described as "not to be attained?"

Buddha said: True, True, Subhúti! I, as possessed of this heart, have come into the condition above described. This term the unsurpassed, just, and enlightened heart, is but a mere name.

Cap. XXIII.—The heart purified leads to virtuous practice.

Moreover, Subhúti, this condition of being of which I speak is one and uniform. There is no such thing as high or low in it. This condition which is named the unsurpassed, just, and enlightened (heart), consists in nothing more than the exclusion of all individual distinctions. A man who practises all the rules of virtuous conduct will forthwith attain this condition. But, Subhúti, when we speak of rules of virtuous conduct, Tathágata declares that these rules are after all no real and lasting rules; the term is but a mere name.

Cap. XXIV.—On the incomparable character of the happiness consequent on this wisdom.

Subhúti, if all the royal Sumerus in the great chiliocosm were gathered together, and a man were to distribute in charity an amount of the seven precious substances equal to this accumulated mass, and if another man were to accept and adopt this Prajná-páramitá Sútra, up to the point of the four canons, and read and recite it, on account of that man,

I declare that his happiness and consequent merit would be incomparably greater than that of the other, so much so, that no number could express the excess of one over the other.

Cap. XXV.—The non-reality of transformational differences.

Subhūti, what think you? say not any of you that Tathāgata thinks thus within himself, "I must deliver all these sentient creatures?" Subhūti, think not thus; and why? because in truth there are no such sentient beings for Tathāgata to deliver; if there were, then Tathāgata would immediately be subject to one of the *individual distinctions*.¹ Subhūti, Tathāgata in speaking of the *first distinction of personality*,² declares that the term "I" is the same as that which is not "I," all other sects indeed believe in the reality of such personality. But, Subhūti, this expression "all other sects" Tathāgata declares likewise to be a mere name, it is the same as that which is the opposite of this term (*i.e.* the name is nothing).³

Cap. XXVI.—The mystical body without any distinct characteristic.

Subhūti, what think you? is it possible to contemplate Tathāgata through the thirty-two "distinctive signs,"⁴ which adorn his person? Subhūti said: Yes! Yes! Tathāgata is manifested through the thirty two distinctive signs. Buddha said: Subhūti, if Tathāgata is to be seen through the medium of these signs, then every Chakrawartti is the same as Tathāgata.

Subhūti addressed Buddha: World-honoured one! as I understand the doctrine which Buddha declares, Tathāgata cannot be seen through the thirty-two distinctive signs. At this time the world-honoured one delivered the following Gāthā, "He who looks for me through any material form, or seeks me through any audible sound, that man has entered on a wrong course, he shall not be able to see Tathāgata."

¹ Namely, the four distinctions constantly alluded to and explained in cap. iii.

² The first distinction, viz., the mark or distinction by which a man is known or speaks of himself as an individual (*Ego-ness*).

³ This chapter is obscure, it is one of pure negation.

⁴ *Lakṣaṇa*.

Cap. XXVII.—But there is a period when it would be incorrect to say that all laws and conditions of being must be disregarded and expunged.

Subhúti, if you should think thus, "Tathágata, by means of his personal distinctions has attained to the unsurpassable condition," you would be wrong, Subhúti. Tathágata has not arrived at this state by means of any such distinctions. But, Subhúti, do not come to such an opinion as this, viz., "that what is called the unsurpassed, just, and enlightened heart is nothing more than the mere neglect and destruction of all rules and conditions." Think not so, for why? the exhibition of this perfect and unsurpassed heart is not the consequence of having disregarded and destroyed all rules, in the active discharge of duty.

Cap. XXVIII.—On not receiving and not coveting the reward of virtuous conduct.

Subhúti, if a Bodhisatwa use in charity as much of the seven precious substances as would fill sakwalas as numerous as the sands of the Ganges; and if another man clearly understand the non-individual character of all conditions of being, and by patient endurance obtain perfection, the meritorious happiness of this Bodhisatwa exceeds that of the former. What then Subhúti, as far as all the Bodhisatwas are concerned there can be no such thing as the appreciation of reward.

Subhúti asked Buddha: "World-honoured one! what is this you say, that Bodhisatwas cannot be said to appreciate reward?"

Subhúti, the reward which a Bodhisatwa enjoys ought to be connected with no covetous desire; this is what I mean by non-appreciation of reward.

Cap. XXIX.—The dignity appertaining to complete rest and composure (Nirvāṇa).

Subhúti, if there be a man who speaks of Tathágata as coming or going, as sitting or sleeping, this man understands not the secret of the system which I declare. For why?

That which is Tathágata has no where whence to come, and no where whither he can go, and is therefore named "Tathágata."

Cap. XXX.—The characteristic of the "One Harmonious Principle."

Subhúti, if a disciple, male or female, were to divide as many great chiliocosms as there are into small particles of dust, do you think that the whole mass of these particles would be numerous or not? Subhúti replied: Very numerous, world-honoured one! but yet if all these particles were such in reality, Buddha would not then have spoken of them in words. What then, if Buddha speaks of all these particles, then they are not really what they are called, it is but a mere name, world-honoured one! Tathágata speaks of the great chiliocosm, but this is nothing real—the term great chiliocosm is but a mere name. What then? if this universe be really something substantial, then it is but the *characteristic*¹ of the "one great harmonious principle."² But Tathágata declares that this also is something unreal—it is only an empty name.

Subhúti, this characteristic of the one "harmonious principle," is a thing which cannot be spoken of in words; it is only the vain philosophy of the world, which has grasped the idea of explaining this.

Cap. XXXI.—Thus there will be no more any acquired knowledge.

Subhúti, if a man say that Buddha declares that there is any such thing as a distinct knowledge of either of the four characteristics before named, do you think that this man properly explains the system I have now expounded?

No, world-honoured one! such a man would not properly explain this system, because Buddha declares that the knowledge of these characteristics is a knowledge of that which is not really existing, and therefore it is impossible.

Subhúti, the persons who aspire to the perfectly enlightened

¹ *Lakṣaṇa.*

² That is, the one principle or essence which includes all else

heart, ought to know accordingly that this is true with respect to all things, and thus prevent the exhibition of any characteristics on any point whatever.

Subhúti, these very characteristics of which we speak are after all no characteristics, but a mere name.

Cap. XXXII.—Every appearance is in fact unreal and false.

Subhúti, if there were a man who kept for charity enough of the seven precious substances to fill innumerable asankyas of worlds, and if there was a disciple, male or female, who aspired after the perfectly enlightened heart, and adopted this Sútra and arrived to (the observance of) the four canons, and carefully recited the various passages of the work and proclaimed them generally for the advantage of men, the happiness of this man would far exceed that of the other. And in what way can the disciple "proclaim them generally?" simply by relying on no conditions or distinctions whatever; thus he will act without agitation or excitement. Wherefore the conclusion is this—

That all things which admit of definition are as a dream, a phantom, a bubble, a shadow, as the dew and lightning flash. They ought to be regarded thus.

Buddha having uttered this Sútra, the venerable Subhúti, and all the Bhikshus and Bhikshunís, the lay-disciples, male and female, and all the devas and asuras, hearing the words thus spoken, were filled with joy, and believing they accepted them and departed.

ART. II.—*The Páramitá-hridaya Sûtra, or, in Chinese, "Mo-ho-pó-ye-po-lo-mih-to-sin-king," i.e., "The Great Páramitá Heart Sûtra."* Translated from the Chinese by the Rev. S. BEAL, Chaplain, R.N.

[Presented December, 1863.]

THIS Sûtra consists of about two hundred and fifty characters. It is repeated in the course of the daily worship of the Buddhists, by rote, as a mantra would be repeated (according to Colebrooke, pp. 8, 9, *Relig. of Hindoos*.) by the Hindoos. In its composition it resembles, or appears to resemble, the sacred writings of the Brahmans. No author's name is attached to it. It does not even begin with the usual preface "thus have I heard" (*evam mayá śrutam*). But we have mentioned in it the Rishi to whom it was communicated, and the Devatá from whom it proceeded. In this particular, at any rate, it strongly resembles the Vedic model. And when we recollect that the later Buddhists attempted in every possible way to absorb the system of the Brahmans in their own, yielding so far as they dared to popular superstitions, we shall not wonder in finding so many similarities, in externals at least, between the two religions.

From its brevity we may suppose that this Sûtra is a condensed form of the larger Páramitá works, abbreviated for the sake of frequent repetition, or, it is possible, that the larger works are but an expansion of this or some other equally curt production (*Wassiljew, Der Buddhismus, s. 145*).

This Sûtra was probably the first translated by the celebrated pilgrim Hiouen Tsang. At any rate, it stands first in the authorized Chinese collection. Some interest attaches to it, moreover, on account of the numerous commentaries on its text, which have been published by a succession of learned Chinese priests. This work is the key, as it were, to the

doctrines of the contemplative or mystic school of Buddhists. This school has taken firm root in the southern districts of China. Hence we find that the most numerous and important editions of the "Heart Sútra" have issued from monasteries in the southern provinces. The most ample, and perhaps most learned (if tedium is a proof of learning) commentary I have met with is that of a priest (Chan sse) called Tai Teën. He was the instructor of a celebrated person, called Han-chang-li, otherwise named Han U, or Han-wen-kung, who was vice-president of the Board of Punishment during the reign of the 11th Emperor of the Tang dynasty. "This officer was originally a strict Confucianist. The Emperor had sent (A.D. 819) some mandarins to escort a bone of Buddha from a place called Fung-tsian-fu, in the province of Shensi, to the capital. All the court, common people, eunuchs and ladies, vied with each other in their idolatrous adoration of this relic. Han-chang-li, however, indignant at their conduct, took this opportunity of presenting a strongly worded remonstrance to the Emperor, which he styled 'Fuh-kuh-hin,' i.e., Memorial on the bone of Buddha. For this honest exposition of his feelings, he was degraded from his post, and appointed prefect of a distant department, called Chiu Chau, in the province of Kwang Tung." After a year's residence in this place he fell sick, and was thus brought in contact with a priest called Tai Teen. To him the exiled mandarin confided his thoughts. A lasting and close friendship ensued. The consequence was, that the celebrated Han-chang-li became a believer in the Buddhist doctrine he had once despised and protested against. We may reasonably suppose that the "Heart Sútra" of Tai Teen was the subject of frequent and earnest consideration with this conscientious officer; and as his appeal against the worship of the relic of Buddha is still authoritatively published and read to the common people, to dissuade them from such superstitions, the fact of the author of that tract having himself become a Buddhist through a consideration of the Sútra we now are about to translate, becomes at least an interesting circumstance in connection with it.

The text and commentary of Tai Teën, which I have used, were republished in 1850 by a scholar (Tau jin), named Woo Tsing Tseu.

Avalokiteśwara. [The Devatá of the Súra.]

When the Prajná Páramitá has been fully practised, then we clearly behold that the five skandha are all empty, vain, and unreal. So it is we escape the possibility of sorrow or obstruction.

Śáriputra. [The Rishi of the Súra.]

That which we call form (*rúpa*) is not different from that which we call space (*ákáśa*). Space is not different from form. Form is the same as space. Space is the same as form.

And so with the other skandhas, whether *vedaná*, or *sanjná*, or *sanskára*, or *vijnána*, (they are each the same as their opposite).

Śáriputra.

All these things around us (*ye dhammá*) being thus stript or devoid of qualities (*lakshaṇa*), there can be no longer birth or death, defilement or purity, addition or destruction. In the midst then of this void (*ákáśa*), there can be neither *rúpa*, *vedaná*, *sanjná*, *sanskára*, or *vijnána* (*i.e.*, neither of the five skandha), nor yet organs of sense, whether the eye, or nose, ear, or tongue, body or mind (*chitta*), nor yet objects of sense, *i.e.* matter (*rúpa*), or sound, odour, or taste, touch, or ideas (*chaitta*), nor yet categories of sense (*dhātu*), such as the union of the object and subject in sight, in smell, in touch, in taste, in apprehension.

So there will be no such thing as ignorance (*avidyá*), nor yet freedom from ignorance, and therefore there can be none of its consequences (*viz.*, the twelve *nidánas*. Colebrooke, p. 255); and therefore no such thing as decay or death (*jará* or *marāṇa*), nor yet freedom from decay and death. So neither can there be a method (or way) for destroying the concurrence of sorrows. No such thing as wisdom, and no such thing as attaining (happiness or rest), as there will not be ought that can be attained.

The Bodhisatwa resting on this Prajná Páramitá, no sorrow or obstruction can then affect his heart, for there will be no

such thing as sorrow or obstruction. Therefore, having no fear or apprehension of evil, removing far from him all the distorting influences of illusive thought, he arrives at the goal of Nirváṇa.

The Buddhas of the three ages, relying on this Prajná Páramitá, have arrived at the “unsurpassed and enlightened” condition (*samyak-sambodhi*).

Therefore we know that this Prajná Páramitá is the Great Spiritual Dháraní,—it is the Great Light-giving Dháraní. This is the unsurpassed Dháraní. This is the unequalled Dháraní, able to destroy all sorrows. True and real, (*i.e.*, full of meaning), not vain (*i.e.*, unmeaning). Therefore we repeat (or let us repeat) the Prajná Páramitá Dháraní.

Then also say—

Ki-tai, Ki-tai,
Po-lo, Ki-tai,
Po-lo-seng-Kitai,
Bo-tái-sah-po-ho.

i.e. [according to M. Julien’s system]:

Gati, Gati, Paragati, Parasangati, Bodhisatvah,
[words I cannot attempt to explain.]

ART. III.—*On the Preservation of National Literature in the East.* By Colonel F. J. GOLDSMID.

[Read 30th November, 1863.]

Example: *The Sindî Legendary Poem of Sâsûi and Punhû.*

ENGLISH translations from Oriental languages are not easily made attractive to the general reader, unless they convey some startling novelty of idea or treatment, a position which they are not often calculated to realise. If literal, they are for the most part verbose or unmeaning; if adaptations to suit the supposed taste of the home public, they become subject to the rules of ordinary criticism, and have seldom the requisite stamina to pass creditably through the ordeal. I have always thought that the true charm of Sa'dî and Hâfiz rests more in the language than in the morals or poetry; consequently, that our English versions, however ably executed, are far from doing justice to the original. The airs are for a full orchestra, and we hear them on a piano or street organ. And if the Persian intellect be, as I believe, one which places sound above import, so also may we esteem that of other Eastern nations, whose poets are humble imitators of the Persians. These remarks apply with especial force to the romantic and fanciful schools of poetry, whether expressed after the fashion of an ode, a ballad, or a sonnet. I use intelligible terms, though all may not precisely correspond with the technical requirements of the Asiatic Muse.

At the same time, to arrive at a due estimate of a nation's genius, it will be necessary to know its words as well as its acts; and as comparatively few people, except those upon whom the task falls professionally, have time or inclination to devote themselves to the study of Oriental tongues, the

work of clothing them in European guise cannot be altogether abandoned. But the interpretation of treaties and political dialogues, instructive and necessary as they cannot fail to prove, is not satisfying. We should know something of a people's inner life and sentiment, as expressed by its own approved domestic spokesmen—in plainer words, by its bards and philosophers; and, in nine cases out of ten, the language of this class is all the more acceptable to us because addressed emphatically to their fellow-countrymen. It comes from and speaks to the heart and the home; it has no *arrière pensée* on civilized criticism; it is simply national, and the author knows nothing of "reserving the rights of translation."

If, then, the literature of distant lands should be valuable to us as an exotic, how much more should it be valued by the people or nation of whose individuality it is the truest and best representative? Or, putting a case more apposite to the argument about to be offered, how much more is it the part of the civilized rulers of that people or nation to treasure it as perhaps the most endurable inheritance of which they are the trustees? Amid the many and vast regions brought under her control, England not only bestows crowns and countries, but she imparts liberty and education. More than this: she exercises her discretion in laying down the language or dialect of her conquered provinces. If a grammar be wanted, she directs one to be made; if an alphabet be incomplete, she calls the attention of her craftsmen to supply the deficiency; and school-books in the vernacular issue from the press at her command by the dozen. But she cannot create a national literature; for few will gainsay the assertion that an educational course is a very different thing indeed. That I am not speaking at random, but on facts and experiences, will presently be shown.

A country, to preserve its nationality, should preserve its language and literature; and where tangible vestiges of the separate existence of both remain, the revival of one should be simultaneous, if possible, with that of the other. It is this feeling which actuates the Magyar of Hungary, who, whether his origin be Fin or Eastern, has been so long a

graft of Central Europe as to have found his second nature there—it is this which actuates him when he rejects the German of his Austrian masters, and clings to his ancestral tongue. In France and Spain the Basque is tenaciously preserved; in our own land the Gaelic, however fallen into disuse, is not suffered to die outright; the Norwegian will not allow the Icelandic wholly to appropriate the old Norse of his forefathers; and so on in many instances. The European instinct is patriotic; while in Asia it is a mere adherence to custom and precedent. The first will admit innovation where it does not interfere with personal liberty; the second abhors all change, from the simple fact that it is change. The Asiatic, that is, *our* Asiatic, would not cut down one tall tree in front of his house, though it obscured the most beautiful view of a whole forest beneath, just because it had been suffered to remain for a whole century before he had become its owner. It must be done for him. At first, he would complain; secondly, he would become reconciled; thirdly, he would forget the whole affair. A very remarkable instance of the revival of a language without a literature, in one of our Indian possessions, will serve to illustrate the meaning here intended, and may not be void of interest.

About twenty years ago, the Province of Sind was conquered by British troops under General Sir Charles Napier, and its people became parts of the mass of Indians who acknowledge the sovereignty of Great Britain. After some five years of occupation, when acquaintance between the governors and governed had so far ripened that administration had become clear and defined to the first, and the last had carefully noted the more salient points of the English character, attention was called to the question of language. There was an acknowledged medium of communication in very general use, called the "Sindi." Viewed as a mere dialect, its immediate geographical neighbours were the Punjābī, Jatakī, Multanī, and Belūchki. Each was distinct, and confined to its own ethnological range. But Sindi, as the language of a province, had no recognized written character, and here was the difficulty: one by no means unimportant.

The Ameers of Sind, Belúchís not Sindís themselves, were of a dynasty that had not ruled so long as sixty years before the British conquest; but their followers were no strangers in the land. Many of them had made it the country of their adoption, by virtue of the family settlements there, long prior to the Belúch accession. I have never heard of an attempt made, under this *régime*, to amalgamate Sindí and Belúchkí, or absorb either, but rather that nonchalance prevailed on the subject. Indeed, the reigning family, while retaining the last, did not object to associate with it the first, and could, perhaps, as a general rule, converse freely in both. But Persian was the language of their literature and of their state. No volume of poetry or prose was ever tendered for patronage or acceptance but in that musical tongue; no official report, or record of the most ordinary administrative act, ever issued from the Talpúr bureau in any other guise. Some of the Ameers composed in Persian. I have seen one or two books of which they were professedly the authors. It was a garbled and a vulgar Persian; but it must be borne in mind that this language, in its native purity, is comparatively unknown in India. Arabic was beyond the capacity of the Sindí or Belúch, or would have met with every attention. Under these circumstances it will not be surprising to find that Sindí, the natural language of the province, inasmuch as it bears its distinctive name, was left to be expressed in characters at the option of the writers; consequently, that the custom in this respect was a matter of caste and prejudice. The educated Mussulman wrote, and this but rarely, a language found in a few, and very few old books (strictly speaking, manuscripts), which he had learnt to read, the character of which was Arabic with the admission of Sanscrit points. This is known as the *Arabic-Sindí*. The Hindoo trader kept his correspondence and accounts in a hieroglyphic which was in many cases quite unintelligible to the members of his own firm and family, much more so to his fellow-traders *en masse*. This is known as the *Hindú-Sindí*, because Khudabádí, Gúrúmúkkí, or any more defined term would be wholly incomprehensive. The spoken lan-

guage of the two might have been assimilated without much effort had there been a common alphabet; but, as above stated, none was to be found to meet the exigency.

The adoption of either the Mahomedan or Hindú character as an action of government, would seem to savour of partiality. One argument, however, was greatly in favour of the former in the scales of political justice. Sind, whatever religious revolutions it had undergone, was decidedly a Mahomedan country, and the Mahomedans were sensitively alive to this fact.

Opinion was divided on the point. Reports were called for and submitted, but judgment was reserved. Years passed with no result. The late Captain Stack published a grammar and dictionary of Sindí in the Devanágari character, but the sale of these books was far from encouraging. The fact is, that, the question of an established alphabet being in abeyance, it was hardly to be expected that English or native students of the language would, to gain their ends, choose the medium of a character current indeed on the other side of India, and useful enough at Bombay, but little known to the coast north of Guzerat. Eventually, the verdict was in favour of Arabic-Sindí; and in order to suit the alphabet to the several sounds required, one new letter and the modifications of other letters were introduced among those heretofore in use in the old Mahomedan manuscripts to which allusion has been made. In 1852 it became the official character of the province. Alphabets were circulated in sheets among the schools and public offices; educational works were lithographed, to turn the alphabet to practical account; and all candidates for government employ were required to master the character for official purposes.

That the effect upon the Mahomedans was not thoroughly satisfactory, may be learned from the following brief extracts of an Educational Report submitted by me in 1858. It was not the quality of the written Sindí to which they objected, but they could not see the object in making Sindí a written language at all:—

“ The existence of the book known as ‘ *Hikáyut us Sáliheen*,

or Narratives of Holy Men, in the Arabic-Sindí character, is a sufficient warrant for the adoption of the latter by Mussulmans, but they do not take to the new books printed with the same readiness exhibited by the Hindoos. I attribute the cause to the little influence exercised, or attempted to be exercised, by the Akhoonds; for where these books have been successfully taught, the success has been surprising. The pabulum is actually devoured: it is seized upon by smart lads as their daily food. The misfortune is that they have not more. They would consume twenty times the amount if set before them.

“It has been the fashion in this country (Sind), for many years, to consider the Persian language to contain all polite learning and literature, while Arabic has represented all that was venerable and scholastic in letters. The neglected ‘Sindí,’ without any one acknowledged character, became the medium of ordinary verbal communication, peculiar to the lips of the ‘Langhas,’ or minstrels, and those who learned by heart their legends. Such fashion had grown into inveterate custom about the period of the conquest; and it is no easy matter to dispel at once a tacit belief that, in substituting a native for a foreign tongue, we are preferring bazar-made tinsel to imported gold.

“Another difficulty to be met is the existence of pseudo-learned men; that is, of a certain set of individuals crammed with the more palpable lore of Arabic schools, without the smallest conception of its application to any useful purposes. Such as these would deem a recitation of the ten Predicaments of Aristotle to be a greater passport to favour and applause than any amount of sound practical knowledge; and their persuasions are not without force.”

The Hindús of Sind are, for the greater part, either Ámils, that is, candidates for the Government Service, or Banyans, the traders or shopkeepers. With the former the alphabet had great success; with the latter it produced, as might have been expected, no fruits whatever: it was a dead letter for all commercial purposes. But so far from Hindú-Sindí being put aside, a question was next raised whether the measure

successfully introduced into the Punjab of employing Devanāgarī to the exclusion of the Khyasthi character could not be carried out in the sister province. To this it was replied—

1. That the Mussulman would never be brought to write the proposed Hindū-Sindī character, supposing that to be the established alphabet, nor would the trading Hindū readily desert the character in which his fathers and forefathers had ever kept their accounts. Not an instance could be recalled of a Mahomedan using or understanding Gūrūmūkkī or Khudabādī. And to establish the Arabic letters and punctuation for entries in a native *vadī* or *roznámchéh* would be a measure productive of endless confusion.

2. It was proposed, however, to introduce, in the course of instruction laid down for provincial schools, a Hindū-Sindī alphabet in addition to the Arabic or Mussulman Sindī alphabet now used in official records. This would not alter the arrangement by which the latter had become the acknowledged character of the province, but would merely furnish material for a new branch of study, required almost solely for a mercantile community.

No further objection having been offered to its progress, and time having done its preliminary part, the resuscitation of Arabic-Sindī may now be considered a *fait accompli*. The staple having thus been strengthened, let us now see what has been done in the way of manufacture.

I have not a list at hand of the numerous educational works, chiefly of an elementary character, which have been published at the Sind Lithographic Press. But it may be noted that a whole set was presented by me, through the Bombay Government, to the International Exhibition, and may, perhaps, be still available for inspection. In the wish to give them a respectable appearance, and at the same time enhance their nationality, the fault was committed of clothing them in Hyderabad embroidered cloth. For this the blame rests upon myself. The result has unfortunately been that an offering intended as a specimen of educational advancement in one of our comparatively new territorial acquisitions, has been con-

verted into a specimen of manual dexterity, and the shell exhibited to the prejudice of its contents.

Among these specimens was a small pamphlet containing a Sindí Poem, entitled *Sáswí* and *Punhú*. It was one of a series which I had hoped to have collected as contributions to the Educational Library in Sind, a measure approved by the Director of Public Instruction in Bombay; but experience soon proved to me that, to get a worthy record of this description of literature, more time and labour would be requisite than were ordinarily at my disposal. The case of *Sáswí* and *Punhú* may be cited as one illustrative of all these legends and romances, among which it stands first in popularity. Unless where one manuscript had been transcribed from another manuscript, or prepared in duplicate, it would be almost impossible to obtain two copies exactly alike. The story had hitherto existed solely in the memory of the minstrels, or in single copies obtained at different times by different persons. Like the Sindí language itself, spoken by many, written by few, and without a common character acknowledged by any, so was the traditionary poem. It was recited by many, seldom criticised, and no set version recognised. Not improbably, the story was a mere theme, and the more the narrator could vary his words from recital to recital, the greater to his professional credit. He was not an *improvisatore*, but a player of variations: although an *improvisazione* is not rare in the East. The Chárans or religious bards of the desert S.E. of Sind, bordering on Cutch and Joudhpoor, are remarkable instances in point.

The present copy of *Sáswí* and *Punhú* was obtained by the agency of two intelligent natives in the Office of the Commissioner in Sind during a recent cold weather tour throughout that province. Two papers were written down from two recitations, each independent of the other, and the results collated. In rendering the tale into English metre of not unfamiliar nine feet measure, I must disclaim any more ambition than that of endeavouring to imitate the rhythm and convey some notion of the character, as well as to follow the literal meaning of the original; making the version use-

ful, if need be, to the student of Sindí. Here and there I have been compelled to deviate from the precise letter of the verse, but not, I hope, to that extent to nullify the last-named object. Captain Richard Burton, H.M. Consul at Fernando Po, an officer whose extraordinary talents as a linguist and an explorer present a combination of which we may be at a loss to find a parallel in the present day, has detailed the argument so skilfully in the fourth chapter of his *History of Sind* (I wish he had called it "*Sind and its Inhabitants*"), that a very few words will suffice to sketch it at second hand.

Sáswi was the daughter of a Brahmin of Thátta. At her birth, it was foretold by the astrologers that she would forsake the religion of her fathers. This prediction so terrified the parents that they placed the infant in a coffer, and committed her to the waters of the Indus. She was found by a washerman, taken to the town of Bhambora, and brought up there.

Some years afterwards, Punhú Khán, a young Belúch chief of Mekrún, heard of the charms of the foundling, then verging on womanhood, obtained access to her house in disguise, wooed, won, and married her. His indignant father, Jám Ári, of Kedje, hearing of the match, caused him to be seized and carried forcibly back to his home. Sáswi, wild at the separation, started off on foot in quest of her lord. On her journey, after various mishaps, she came in the way of a hill barbarian, who attempted to gain possession of her. She prayed for relief, and was instantly swallowed up in the earth!

A similar fate awaited Punhú, who soon after arrived at the same spot, like Romeo, found his Juliet departed, and courted death as the only remedy for his woe.

The story of Mahomed Cassim's invasion is too well known to readers of Asiatic annals to need repetition even in abstract. It is only now further alluded to, because it is popularly considered the conquest of Sind, when, in reality, it must rather have been the overwhelming irruption of Mahomed of Ghizni which subjugated the province. The immediate successors of Mahomed Cassim effected but a partial occupation. Let it be

granted that the Arabs colonized, and changed much of the old-established order of things. They shivered the Pagan staff, as at Déwul, and ridiculed the idol worship, as at Alore; but the huge Sanscrit tree had its thousand ramifications, and these were not to be uprooted by a comparative handful of adventurers. As with the peculiar genius of the country and people invaded, so with their language. Intolerance and forcible conversion became the order of the day. The broken stick and trampled image may be likened to the written character or outward symbol. As the mosque and minaret were founded amid the subverted temples and shrines of Indian mythology, so was the stately letter of the Koran driven into the many-phased Indian alphabet. Hence the old manuscript language, whose renewal under the name of Arabic-Sindí has been described.

That Kedje Mekrán, the neighbouring country to Sind, was ruled by a chief designated "Jám," proves the power of the Semmas to the westward, two centuries before they became the sovereigns of Sind itself. Usually considered a race of Rajputs, their descendants are now traceable in the Jharejas of Cutch, and the Sind Semmas and Jokyas of the present day—the first adhering to the idolatry of their ancestors, the second so bigoted to Mahomedanism as to reject wholly the truth of their Hindú origin. But there is evidence to make the Judgáls or Zudgáls of Sus Beyla Semmas also; and we find this large section still exercising a *quasi* independent authority not only over 240 miles of coast from Kurrachee westward, but as far to the west as the boundary of the Muscat Imám's territory of Chinbár, namely, between the meridians $60^{\circ} 40'$, and $61^{\circ} 40'$ E. lon. In Kurrachee, the Jokyas are the aboriginal owners of the soil; and eastward in Cutch the Jharejas are the reigning dynasty. The title of Jám, which was probably assumed by the first Semma converts to Mahomedanism, from their supposed ancestor Jamshíd, was peculiar to the Tháttah sovereigns of Lower Sind in the fourteenth and fifteenth centuries, as it is now hereditary with the chief of the Jokyas and the ruler of Beyla. The facts afford matter of much interesting inquiry

to the ethnologist—an inquiry which has yet to be carried to satisfactory results.

But though history and chronology may not derive valuable aid from our poem, it has merits of its own more akin to those which may reasonably be looked for in a popular Oriental legend thought worthy of revival. Novelty of plot can hardly be expected in a story at least five hundred years old, but novelty of incident will not, perhaps, be found wanting. The adventures of the young Belúch chief Punhú Khán, when, disguised as a washerman, he finds access to the house of Sáswí's supposed father, himself a washerman, are told with piquancy and humour. He is required to show his professional skill, clumsily batters the clothes to pieces against the washing-stone in endeavouring to cleanse them, then hits on the successful device of quieting the owners by placing a gold coin in each one's bundle. I greatly regret the incompleteness as well as prolixity in the version which I have procured; and I say this the more strongly because the extracts given in Captain Burton's work on Sind lead me to believe that he must have obtained a better one. Not that I grudge him the triumph due to his own perseverance and discrimination; but that it is to be feared the genius of the Sindí bard has deteriorated from want of practice and encouragement under British occupation. My Múnshi appropriated, at my own suggestion, two of the extracts, and these two will be found, in stanzas 65 and 74 of the lithographed poem Arabicized from Captain Burton's Romanized Sindí. It should be noted, however, that Captain Burton, speaking of the translations and specimens of the tales and songs most admired by Sindís, which he presents to the public, explains that his MS. is a small one of about thirty pages, in Sindí and Persian both. This leads me to believe that he could not have possessed complete copies of each poem; and this impression is confirmed in the case of Sáswí and Punhú, by the statement that his poet plunges in *medias res*, neglecting his prolegomena. Now my poet, though less eloquent than Captain Burton's, begins at the beginning of his subject.

Another version of Sáswí and Punhú was obtained some

four or five years ago by Dr. Trumpp, of the Church Missionary Society. Had this erudite gentleman given to the world his collection of Sindí Poems, the present attempt would have been superfluous. But I am apprehensive that, if they do appear at all, it will be in a guise foreign to that approved by Government. Dr. Trumpp objects to the *Arabic-Sindí* character, upon philological principles, and prefers the *Urdú*, which, he contends, can be rendered equally applicable to the expression of Sindí sounds. Without recording an unsustained opinion on this point, I cannot but hope that the missionaries will adopt the Government letter. A point of philology is surely not so important to their great objects as the use of a character generally understood throughout the province by all educated Sindís, except the strictly mercantile class, who steadily refuse to receive any character but their own. Without fighting the philological battle, I may confidently assert that the *Arabic-Sindí* is so understood, is day by day becoming more firmly rooted, and that the *Urdú-Sindí* is comparatively illegible to natives, even in Dr. Trumpp's admirably clear type. Under these circumstances, to revert to my starting-point, it is deferentially submitted that a collection of all original, semi-original, and popular traditional literature in Sind, in the revived and recognised character, will be more valuable to the student of the Sindí language, and more acceptable to the province itself, than educational translations, however well executed and useful. But early measures should be taken to preserve these traditions, for they are liable to deterioration under the influence of Western civilisation. It is not intended that education should relax a jot, or make way for these revivals; only that it should not throw them into too cold a shadow, when sunlight is required.¹

¹ Since writing the above, I learn that Government sanction has been given to the publication of Dr. Trumpp's valuable Sindí collections. Had these appeared before the results above noted had been obtained, my humble advocacy would not, in all probability, have been offered on behalf of the "*Arabic-Sindí*." As it is, I see no cause to modify the opinion recorded. Under any circumstances, the people themselves should be the best judges of their own alphabet, and will, doubtless, be allowed to confirm or modify the choice heretofore made.

To conclude. A recent exploration on the Mekrán coast caused me to make inquiries on the scenery of the little drama of Sáswí and Punhú. By one I was informed that the lovers' resting place is in the "Pubbúní" pass of the hills dividing Sind from Beyla; by another that it is at Mount Phír, some miles to the westward. The former notion is that commonly received. The pass is now little frequented, owing to its many difficulties, and the vicinity, both north and south, of simple routes. The legend seems just as well known in Beyla as in Sind.

ART. IV.—*On the Agricultural, Commercial, Financial, and Military Statistics of Ceylon.* By E. R. POWER, Esq.

[Read 21st December, 1863.]

THE following brief remarks on the Agricultural and Commercial Statistics of Ceylon, past and present, may not be without interest to the Members of the Committee of Agriculture and Commerce of the Royal Asiatic Society.

First. In respect to the present great staple of the colony. In 1809, according to the records of the Local Government under the Dutch *régime*, the production of coffee in the island, both for consumption and export, was about 250,000 lbs. From that period the production continued steadily to increase; but it was in 1836, when the equalization in England of the duty on East and West India Coffee took place, that European capital and skill were brought to bear, and that to a large extent, in reference to the cultivation of the berry. Prior to the equalization of the duties, the import duty on Ceylon coffee in England had been 9*d.* per lb. In 1836 the duty was reduced to 3*d.* per lb., or 28*s.* per cwt.; and as the demand for the article continued undiminished, an equal rise of the price of coffee in bond simultaneously took place, the price to the consumer remaining much as before, and the importer reaping the benefit.

The quantity of coffee exported since the year 1838,—(at which year the interesting statistical information anent Ceylon, which is to be found in the printed proceedings of the Committee of Commerce and Agriculture, of March, 1840, page 145, ends),—is as follows:—

| Year. | Quantity. | Year. | Quantity. |
|----------|-------------|----------|-------------|
| 1839 ... | 40,668 cwt. | 1842 ... | 80,584 cwt. |
| 1840 ... | 62,074 „ | 1843 ... | 119,805 „ |
| 1841 ... | 68,206 „ | 1844 ... | 94,847 „ |

| Year. | Quantity. | Year. | Quantity. |
|----------|--------------|-----------------------|--------------|
| 1845 ... | 133,957 cwt. | 1854 ... | 328,971 cwt. |
| 1846 ... | 178,603 " | 1855 ... | 407,621 " |
| 1847 .. | 173,892 " | 1856 ... | 440,819 " |
| 1848 ... | 293,221 " | 1857 ... | 602,266 " |
| 1849 ... | 280,010 " | 1858 ... | 544,507 " |
| 1850 ... | 373,593 " | 1859 ... | 589,778 " |
| 1851 ... | 278,473 " | 1860 ... | 620,132 " |
| 1852 ... | 349,957 " | 1861 ¹ ... | 632,449 " |
| 1853 . | 372,379 " | | |

An export duty of 1s. per cwt. is levied in Ceylon.

Coffee land; and land sold for coffee, consists of 462,254 acres, of which, probably, 132,000 acres is the area bearing coffee at present. Land for coffee cultivation is put up to public competition at an upset price of £1 an acre.

Cinnamon.—In the paper I have already alluded to,—(Proceedings of Committee of Commerce and Agriculture, March, 1840, page 145),—the writer enters into some detail in reference to the then state of the Ceylon cinnamon trade; and I will only therefore remark that since that paper was written all the Government preserved cinnamon gardens have been sold, with the exception of a portion in the immediate vicinity of the town of Colombo, which is retained by Government, and small building lots from which are exposed at public sale from time to time as the requirements of the public demand. The only duty on cinnamon exported from Ceylon is 2s. per bale of 100 lbs. net, without reference to quality. There is, I apprehend, little doubt but that Ceylon still produces the finest cinnamon, and that it is superior in flavour to both the Malabar and Java spice; but the increasing consumption of both the latter demonstrates that they can be substituted with effect for the finer bark of Ceylon. The preserved gardens purchased from Government by private individuals are, taken as a whole, in excellent condition. Magnificent samples of cinnamon, of the three qualities, were exhibited at the last International Exhibition from the estate of Mr. David Smith, of Kaderane, in the western province of Ceylon.

¹ Declared value, £1,599,223

The following is a statement of the cinnamon exported from Ceylon from 1838 to the end of 1860 :—

| Year. | Quantity. | Year. | Quantity. |
|----------|--------------|----------|--------------|
| 1838 ... | 558,110 lbs. | 1850 ... | 733,781 lbs. |
| 1839 ... | 398,198 „ | 1851 ... | 644,857 „ |
| 1840 ... | 596,592 „ | 1852 ... | 508,491 „ |
| 1841 ... | 389,373 „ | 1853 ... | 427,666 „ |
| 1842 ... | 317,919 „ | 1854 ... | 956,280 „ |
| 1843 ... | 121,145 „ | 1855 ... | 784,284 „ |
| 1844 ... | 662,704 „ | 1856 ... | 877,547 „ |
| 1845 ... | 1,057,841 „ | 1857 ... | 887,959 „ |
| 1846 ... | 408,211 „ | 1858 ... | 750,744 „ |
| 1847 ... | 401,656 „ | 1859 ... | 879,361 „ |
| 1848 ... | 447,369 „ | 1860 ... | 675,155 „ |
| 1849 ... | 491,687 „ | | |

The land under cinnamon cultivation is about 14,400 acres.

Cocoa-nut Oil.—The history of the rise and progress of this article of export illustrates the beneficial results of the action of Government in a tropical and recent agricultural colony (for prior to 1830 Ceylon could only be regarded as a military post of importance), up to a certain point, in introducing new articles of export.

The Local Government of the day imported a steam engine from England, manufactured the oil in Colombo, and consigned it to London, to the island agent, where it was sold and brought to the credit of the Government. In 1831, Governor Sir R. Wilmot Horton directed that the account sales of the oil should be duly published in the Government Gazette, with a note, that the engine, etc., were for sale. A highly respectable firm purchased the engine, etc., and from that period commenced the export of cocoa-nut oil by private individuals, which has reached so high a figure at the present time.

The following is the quantity of cocoa-nut oil exported from Ceylon since 1838 up to 1860, both years inclusive.

| Year. | Quantity. | Year. | Quantity. |
|----------|----------------|----------|----------------|
| 1838 ... | 638,677 galls. | 1841 ... | 475,742 galls. |
| 1839 ... | 242,680 „ | 1842 ... | 321,966 „ |
| 1840 ... | 357,543 „ | 1843 ... | 475,967 „ |

| Year. | Quantity. | Year. | Quantity |
|----------|----------------|----------|----------------|
| 1844 ... | 726,206 galls. | 1853 ... | 749,028 galls. |
| 1845 ... | 443,301 „ | 1854 ... | 1,033,974 „ |
| 1846 ... | 282,186 „ | 1855 ... | 1,059,272 „ |
| 1847 ... | 123,981 „ | 1856 ... | 1,046,326 „ |
| 1848 ... | 197,851 „ | 1857 ... | 1,679,258 „ |
| 1849 ... | 311,526 „ | 1858 ... | 777,161 „ |
| 1850 ... | 513,279 „ | 1859 ... | 1,188,637 „ |
| 1851 ... | 407,960 „ | 1860 ... | 1,549,088 „ |
| 1852 ... | 443,699 „ | | |

The export duty levied in Ceylon is 7½*d.* per cwt.

56,000 acres of land have been sold for cocoa-nut cultivation. The present area of land under cocoa-nut cultivation is, probably, about 129,000 acres.

Rice.—About 400,000 acres of land is under rice cultivation, perhaps more; but the island does not yield, by any means, the quantity required by its inhabitants and immigrants, and is a large importer from Continental India, etc. It is to be hoped that, sooner or later, the good effects of recent local legislation, enforcing former native customs, in regard to the irrigation of rice fields, will become manifest, by a larger area of land being under rice cultivation than is at present the case.

Cotton.—There are no cotton estates in the island: a portion of the samples of cotton sent to the late International Exhibition were from small patches of land in which cotton had been sown by European gentlemen as an experiment; the remainder of the samples sent were grown by the natives on their *cheynes*, or high and dry lands. Mr. Wanklyn, of the Cotton Supply Association, valued the samples sent as follows:—No. 1. Like good strong New Orleans, worth from 12*d.* to 13*d.* per lb. No. 2. Not good colour, but strong, worth 12*d.* per lb. No. 3. Short, weak, and coarse, worth from 10*d.* to 11*d.* per lb.

The cotton, which I perceive has been lately reported in a printed paper as being the produce of Ceylon, was grown in the Madras Presidency, and was only reshipped from Ceylon. A considerable quantity of native cotton was, doubtless, pro-

duced many years ago, and was manufactured into native cloth in the island, but not, to the best of my knowledge, exported. Small quantities of cotton are still produced in the northern, eastern, and north-west provinces, and are manufactured into cloths. The importation of manufactured goods of late years from England has led to a considerable diminution of the cotton grown on the island, and the quantity of native cotton sold is so small that no fixed price can be named as its local market value.

I am, however, of opinion that if a few cotton estates were opened under European superintendence, in suitable localities, and if prices maintain anything like the present standard, the natives would cultivate cotton to a far greater extent than they do at present: this has occurred in the case of native coffee cultivation in Ceylon.

The Government of Ceylon, with the ready sanction of the Secretary of State for the Colonies, is prepared to afford due encouragement to persons who may feel disposed to embark in the cultivation of cotton. At present there exists no actual want of labour in the colony for estate purposes, drawn from the continent of India; but, individually, I hold the opinion that Chinese labour would answer the best for cotton cultivation in Ceylon. I mean purely agricultural labourers, drawn from the densely-populated provinces north of Shanghai. Considering their strength, capacity for work, and this latter of a *continuous* character, Chinese would not be found expensive, and are, in my opinion, well adapted, as I have already mentioned, for employment in the cultivation of cotton. Chinese, both *male and female*, have been introduced with good effect into British Guiana for sugar cultivation.

The large works of a reproductive character which are being carried on in Continental India by Government and private agency, it is apprehended will, sooner or later, disturb more or less the supply of labour in Ceylon drawn from India.¹

¹ There are, it is supposed, upwards of 146,000 immigrants employed in Ceylon, chiefly on the coffee estates. The rate of pay varies from 7d. to 9d. a day for an able-bodied man.

Financial Position of the Colony.—The revenue of Ceylon (1861) was £751,997; the expenditure (1861) amounted to £651,989. The only public debt is £100,000, which was raised to pay off the old Ceylon railway, and payable in 1868. A further sum of £250,000, being the first instalment of £1,000,000, which her Majesty's Government have sanctioned being raised, to be applied exclusively to railway purposes within the island, has just been borrowed: a high rate of premium having been given by the applicants, the debt is redeemable within fifteen years. The export duties levied in the island have been reimposed, to meet the interest of the loan, and their amount is kept distinct from the general revenue of the colony.

At present the colony pays £100,536 towards its military expenditure; and, from the statement made by the Under Secretary of State for the Colonies in the House of Commons in March last, it would appear to be the intention of her Majesty's Government to call upon the colony to contribute a further sum for military establishments. It is to be hoped, when this additional charge is imposed, the required steps will be taken to reduce the heavy and, what I have heard admitted by military men of experience, unnecessary charges for the island military staff, and to place the whole military expenditure under the control of the Local Government, who, while acting with due liberality to her Majesty's troops, would prune all unnecessary charges. The present military force consists only of *one* European regiment, one Malay rifle regiment, and a few Royal Artillerymen, while nearly the same staff is retained as when the military force in the colony consisted of *four* European regiments, and more native troops. A major-general and staff, with an adjutant-general, and quartermaster-general, etc., can surely not be required with a force of only two regiments; the senior colonel in the island could command these few troops, and a considerable and legitimate saving would follow. Again, the charges involved in keeping up the fortifications of the towns are considerable. To man effectively the very extensive fortifications of Colombo alone, would require probably treble the

whole existing military force in the island! If authority were given to the Local Government to remove the present fortifications, substituting in their stead one or more batteries, to be mounted with Armstrong guns, such guns, as the shore is very rocky, with a high surf, might be expected to do good service against a hostile squadron; while the sale of the site and *débris* of the existing huge fortifications of Colombo—constructed by the Dutch, doubtless to protect themselves from an internal enemy, the Kandyans being then an independent nation—would yield a considerable sum to the local treasury, and their removal would add much to the salubrity of Colombo, and be of considerable advantage to its greatly increasing trade.

In regard to the fortifications of Trincomalee, I would submit that the cost of their repair, etc., should be viewed as an Imperial question, as they are required for the safety of her Majesty's dockyard, and other naval establishments at that magnificent port (one of Lord Nelson's principal harbours of the world). Many years ago, it was recommended by the then Governor of Ceylon, Sir R. Wilmot Horton, and the Naval Commander-in-Chief in the Eastern Seas, Sir John Gore, that Trincomalee should be garrisoned by marines, to be relieved, from time to time, by marines of the men-of-war on the station: this plan is, I would submit, worthy of present consideration. In regard to the harbour on the south of the island, called Point de Galle, towards the close of last year a letter was addressed to the editor of the *London Times*, signed "A Bengalee," stating that enormous sums have been spent by the Local Government on this harbour. To my personal knowledge, this is a complete error; and it may be convenient if I mention the correct state of the case. It would appear, from Parliamentary papers that have been lately printed, relative to the improvement of Galle harbour, that the subject is at present under the consideration of her Majesty's Government; the Secretary of State for the Colonies being prepared, if the Treasury concur in his Grace's views, to propose to the local legislature a vote for an outlay not exceeding £25,000 for the improvement of Galle harbour,

the amount to be raised by loan, and to be repaid by additional tonnage dues. The Governor has strongly pressed the subject on the attention of the home authorities. His Excellency states in his published despatch to the Colonial Department, that the addition of a safe and commodious harbour only is needed to make Galle the most important port in the Indian Seas. In the letter above alluded to of "Bengalee," I gather that, while he takes a *couleur de rose* view of Bepore, as a port of call in preference to Galle, he still admits that it is exposed to a heavy surf, although not so bad as that experienced at Madras.

As I am under the impression that it is an admitted fact that Ceylon is far more salubrious than the continent of India, so much so, that several of the home life assurance companies (no mean authorities) have reduced the extra premia on the lives of residents in that colony;—looking at the admirable roads, far better than those on the neighbouring continent, indeed, as good as any in Europe, which connect the temperate climate of the interior with the sea coast; looking also at the railroad between Colombo and Kandy, now in course of construction, and at the electric telegraph connecting Ceylon with all India,—the proposition submitted some years ago by a former governor of Ceylon (Sir. R. Wilmot Horton) to the Home Government of the day, *i.e.*, that from the known salubrity of Ceylon, especially that part which is known as the Mountain Zone (Kandy and Newera Ellia, the latter station being about 6,200 feet above the level of the sea, with a very low range of the thermometer), the island would serve as an admirable dépôt for two or three European regiments for the Indian establishment, to be maintained, of course, at the cost of the Indian Government, and ready to move down at any moment to the seaports of Colombo or Galle, the latter being the great "port of call" for all steamers in the eastern seas,—is well worthy the present consideration of the proper authorities. I may venture to add, that, putting aside the great advance in prosperity of Ceylon, its geographical position, its truly magnificent harbour of Trincomalee, and the inoffensive and loyal character

of its population,—the latter fairly tested by a former governor (Sir H. G. Ward) being able to dispense with nearly all the European troops in the island, and to send them to Bengal on the breaking out of the Indian disturbances—Ceylon may fairly be considered one of the chief keys of our Indian Empire. Again, as it is stated in a most interesting article in a late number of the *Friend of India*, headed “The Sole Military Highway to India,” at Ceylon all the invalids of our force in the East might be periodically collected and despatched to the Mediterranean, from time to time, a course which would save many valuable lives, representing so much money, to the army.

As Mr. C. Fortescue, with much truth, stated in his place in the House of Commons, the proposal of annexing Ceylon to Continental India has caused alarm in the colony, and justly so. Ceylon has hitherto been foremost in the East, as regards liberality and progress,—she has had for many years an open council, and welcomed the arrival of European planters to develop her resources, and thereby benefit all classes. After years of close monopoly, the Government of British India is following, in many particulars, the example of Ceylon; and it would be most unfair to hand over this now flourishing colony to be a mere “apanage” of the huge Indian Empire; its vital interests to be, possibly, neglected, amidst the more absorbing demands of Continental India. The native inhabitants and European colonists have reason to be contented with the rule of the Secretary of State for the Colonies, and have no wish for a change of home masters.

ART. V.—*Contributions to a Knowledge of the Vedic Theogony and Mythology.* By J. MUIR, D.C.L., LL.D.

[Read 18th January, 1864.]

IN the fourth volume of my Sanskrit Texts I have collected the principal passages of the Vedic Hymns which refer to the origin of the universe, and to the characters of the gods Hiranyagarbha, Viṣvakarman, Viṣṇu, Rudra, and the goddess Ambikā; and have compared the representations there given of these deities with the later stories and speculations on the same subjects which are to be found in the Brāhmaṇas, and in the mythological poems of a more modern date. In the course of these researches, I have also introduced occasional notices of some of the other Vedic deities, such as Aditi, Indra, Varuṇa, etc.

In the present and some following papers, I propose to give a further account of the cosmogony, mythology, and religious ideas of the Rig Veda,¹ and to compare these occasionally with the corresponding conceptions of the early Greeks.

To a simple mind reflecting, in the early ages of the world, on the origin of all things, various solutions of the mystery might naturally present themselves. Sometimes the production of the existing universe would be ascribed to physical, and at other times to spiritual, powers. On the one hand, the various changes which are constantly in progress

¹ This subject has been already treated by Professor Roth in his dissertation on "The Highest Gods of the Aryan races," in the Journal of the German Oriental Society, v. 67 ff., by the same writer, and by Professor Whitney in the Journal of the American Oriental Society, vi. 291 ff., and 331 ff., by Professor Roth in the Journal of the German Oriental Society, vii. 607 ff., by Professor Max Müller in the Oxford Essays for 1876, and in his History of Anc. Sansk. Lit. pp. 631 ff., by Professor Wilson in the Prefaces to the three vols. of his translation of the Rig Veda, by M. Langlois in his notes to his French translation of the Rig Veda, by Professor Weber, and by Drs. Kuhn and Buhler, etc. etc.

in all the departments of nature might have suggested the notion of the world having gradually arisen out of nothing, or out of a pre-existing chaos. Such an idea of the spontaneous evolution of all things out of a primeval principle, or out of undeveloped matter, called Prakṛti, became at a later period the foundation of the Sāṅkhya philosophy. Again, the mode in which, in the early morning, light emerges slowly out of darkness, and objects previously undistinguishable assume by degrees a distinct form and colour, might easily have led to the conception of night being the origin of all things. And, in fact, this idea of the universe having sprung out of darkness and chaos is the doctrine of one of the later hymns of the R. V. (x. 129). On the other hand, our daily experience leads to the conclusion that every thing which exists must have had a maker, and the great majority of men are impelled by a natural instinct to create other beings after their own image, but endowed with superior powers, to whose conscious agency, rather than to the working of a blind necessity, they are disposed to ascribe the production of the world. In this stage of thought, however, before the mind had risen to the conception of one supreme creator and governor of all things, the different departments of nature were apportioned between different gods, each of whom was imagined to preside over his own especial domain. But these domains were imperfectly defined; one was confused with another, and might thus be subject, in part, to the rule of more than one deity; or, according to the diverse relations or aspects in which they were regarded, these several provinces of the creation might be subdivided among distinct divinities, or varying forms of the same divinity. These remarks might be illustrated by numerous instances drawn from the Vedic mythology. In considering the literary productions of this same period, we further find that as yet the difference between mind and matter was but imperfectly conceived, and that, although, in some cases, the distinction between any particular province of nature and the deity who was supposed to preside over it was clearly discerned, yet in other cases the two things were confounded, and the same visible object was

at different times regarded in different lights, as being either a portion of the inanimate universe, or an animated being. Thus, in the Vedic hymns, the sun, the sky, and the earth, are looked upon sometimes as natural objects governed by particular gods, and sometimes as themselves gods who generate and control other beings.

The varieties and discrepancies which are in this way incident to all nature-worship, are, in the case of the Vedic mythology, augmented by the number of the poets by whom it was created, and the length of time during which it continued in process of formation.

The Rig Veda consists of more than a thousand hymns, composed by successive generations of poets during a period of many centuries. In these songs the authors gave expression not only to the notions of the supernatural world which they had inherited from their ancestors, but also to their own new conceptions. In that early age the imaginations of men were peculiarly open to impressions from without; and in a country like India, where the phenomena of nature are often of the most striking description, such spectators could not fail to be overpowered by their influence. The creative faculties of the poets were thus stimulated to the highest pitch. They saw everywhere the presence and agency of divine powers. Day and night, heaven and earth, rain, sunshine, all the parts of space, and all the elements, were severally governed by their own deities, whose characters corresponded with those of the physical operations or appearances which they represented. In the hymns composed under the influence of any grand phenomena, the authors would naturally ascribe a peculiar or exclusive importance to the deities by whose action these appeared to have been produced. Other poets might attribute the same natural appearances to the agency of other deities, whose greatness they would in consequence extol; while others again would adopt in preference the service of some other god whose working they seemed to witness in some other domain. In this way, while the same traditional divinities were acknowledged by all, the power, dignity, and functions

of each particular god might be differently estimated by different poets, or perhaps by the same poet, according to the external influences by which he was inspired on each occasion. And it might even happen that some deity who had formerly remained obscure, would, by the genius of a new poet devoted to his worship, be brought out into greater prominence. In such circumstances it need not surprise us if we find one particular power or deity in one place put above, and in another place subordinated to, some other god; sometimes regarded as the creator, and sometimes as the created. This is illustrated in the case of the first Vedic divinities to which I shall refer, viz., Heaven and Earth.

I. DYAUS AND PRTHIVÎ.

In addition to numerous detached verses in which Heaven and Earth (Dyaus and Prthivî) are introduced among other divinities, are invited to attend religious rites, and supplicated for different blessings, there are several hymns (such as i. 159; i. 160; i. 185; iv. 56; vi. 70; and vii. 53,) which are specially devoted to their honour. As a specimen of the way in which they are addressed, I subjoin a translation (very imperfect, I fear,) of the 159th and part of the 160th hymn of the first book:—

i. 159 (1). “At the sacrifices I worship with offerings Heaven and Earth, the promoters of righteousness, the great, the wise, the energetic, who, having gods for their offspring, thus lavish, with the gods, the choicest blessings, in consequence of our hymn.

(2). “With my invocations I celebrate the thought of the beneficent Father, and that mighty sovereign power of the Mother. The prolific Parents have made all creatures, and through their favours (have conferred) wide immortality on their offspring.

(3). “These skilful energetic sons (the gods?) destined the great Parents for the first adoration. Through the support both of the stationary and moving world, ye two preserve fixed the position of your unswerving son (the sun?).

(4). "These wise and skilful beings (the gods?) have created (2) the kindred twins sprung from the same womb, and occupying the same abode. The brilliant sages stretch in the sky and in the atmosphere an ever-renewed web.

(5). "That desirable wealth we to-day ask through the energy of the divine Savitr: confer on us, O Heaven and Earth, through your good will, wealth with goods, and hundreds of cows."

i. 160 (1). "The brilliant god, the sun, by a fixed ordinance, moves between these two,—the Heaven and Earth,—which are auspicious to all, regular sustainers of the sage (the sun?) of the firmament, well-born, the two hemispheres.

(2). "Widely expanded, vast, unwearied, the Father and the Mother preserve all creatures. The two worlds are defiant, and, as it were, embodied, when the Father invested them with forms.

* * * * *

(4). "He was the most skilful of the skilful gods who produced these two worlds which are auspicious to all, who, desiring to create an excellent work, meted out these regions and sustained them by undecaying supports.

(5). "Being lauded, may the mighty Heaven and Earth bestow on us great renown and power," etc.

In the hymns Heaven and Earth are characterized by a profusion of epithets, not only such as are suggested by their various physical characteristics, as vastness, breadth, profundity, productiveness (i. 160, 2; i. 185, 7; iv. 56, 3; vi. 70, 1, 2); but also by such as are of a moral or spiritual nature, as innocuous or beneficent, promoters of righteousness, omniscient (i. 159, 1 f.; i. 160, 1; iv. 56, 2; vi. 70, 6). The two together are styled parents, *pitarā* (as in i. 159, 2; iii. 3, 11; vii. 53, 2; x. 65, 8), or *mātarā* (as in ix. 85, 12; x. 1, 7; x. 35, 3;¹ x. 64, 14). In other passages the Heaven is separately styled father, and the Earth mother² (as in R.V.

¹ Here they are supplicated to preserve the worshipper sinless. In R.V. vi. 15, 7, they are called *mātarā yajñai rtavya*, "the great parents of sacrifice."

² The appellation of mother is naturally applied to the earth, as the source from which all vegetable products spring, as well as the home of all living crea-

i. 89, 4; i. 90, 7; i. 159, 2; i. 160, 2; i. 185, 11; v. 42, 16; vi. 51, 5;¹ vi. 70, 6; vi. 72, 2). But they are regarded as the parents not only of men, but of the gods also, as appears from the various texts where they are designated by the epithet *devaputre*, "having gods for their children" (viz., in i. 106, 3; i. 159, 1; i. 185, 4;² iv. 56, 2; vi. 17, 7; vii. 53, 1; x. 11, 9). In like manner it is said (in vii. 97, 8) that "the divine Heaven and Earth, the parents of the god, have augmented Brhaspati by their power;"³ (in viii. 50, 2) that they "have fashioned the self-resplendent and prolific (Indra) for energy;" and (in x. 2, 7) they are described as having, in conjunction with the waters, and with Tvashtṛ, begotten Agni. And in various passages they are said to

tures. This is remarked by Lucretius, "De Rerum Natura," in these lines, V. 793 ff. :—

"Nam neque de cælo cecidisse animalia possunt,
Nec terrestria de salsis exisse lacunis :
Linqitur ut merito maternum nomen adepta
Terra sit, e terra quoniam sunt cuncta creata," etc.

And again, V. 821 :—

"Quare etiam atque etiam maternum nomen adepta
Terra tenet merito, quoniam genus ipsa creavit
Humanum atque animal prope certo tempore fudit," etc.

And, in illustration of the idea that the Heaven is the father of all things, I may quote his words, ii. 991 :—

"Denique cælesti sumus omnes semine oriundi :
Omnibus ille idem pater est, unde alma liquentis
Umoris guttas mater cum terra recepit,
Feta parit nitidas fruges arbustaque laeta
Et genus humanum," etc.

And ii. 998 :—

"Qua propter merito maternum nomen adepta est.
Cedit item retro de terra quod fuit ante,
In terras, et quod missumst ex ætheris oris
Id rursum cæli rellatum templa receptant."

See also V. 799 :—

"Quo minus est mirum, si tum sunt plura coorta
Et majora, novâ tellure atque æthere adulta," etc.

My attention was drawn to these passages by finding them referred to in Professor Sellar's "Roman Poets of the Republic," pp. 236, 247, and 276. On the same subject a recent French writer remarks: "Cent mythologies sont fondées sur le mariage du ciel et de la terre."—"Essais de Critique Religieuse," par Albert Réville, p. 383. The Greek poets also, as Hesiod (Opp. 561), Æschylus (Prom. 90; Septem contra Thebas, 16), Euripides (Hippol. 601) speak in like manner of the earth being the universal mother.

¹ The words of the original here are, *Dyaush pitah Pythiri Matar adhrug Agne bhratar Vasaro mṛlatā nah*, "Father Heaven, innoxious mother Earth, brother Agni, Vasus, be gracious to us."

² In verse 6 of this hymn they are called *janitri*, "the parents."

³ In iii. 63, 7, and iv. 2, 16, the Angirases are said to be *divasputrāḥ*, sons of Dyaus.

have made and to sustain all creatures (as in i. 159, 2; i. 160, 2; i. 185, 1), and even to support "the mighty gods" (iii. 54, 8).¹

On the other hand, heaven and earth are spoken of in other places as themselves created. Thus it is said (i. 160, 4; iv. 56, 3), that he who produced heaven and earth must have been the most skilful artizan of all the gods.² Again, Indra is described as their creator (viii. 36, 4); as having formed (?) them (x. 29, 6); as having generated from his own body the father and the mother (by which heaven and earth appear to be intended, x. 54, 3); as having bestowed them on his worshippers (iii. 34, 8); as sustaining and upholding them (iii. 32, 8; vi. 17, 7; x. 55, 1); as grasping them in his hand (iii. 30, 5); as stretching them out like a hide (viii. 6, 5). The same deity is elsewhere (vi. 30, 1) said to transcend heaven and earth, which are equal to only a half of the god,³ and they are further represented as submitting to his power (vi. 18, 15); as following him as a chariot wheel a horse (viii. 6, 38); as bowing down before him (i. 181, 1);⁴ as trembling from fear of him (iv. 17, 2;⁵ vi. 17, 9; viii. 86, 14); as being disturbed by his greatness (vii. 23, 3); as subject to his dominion (x. 89, 10). The creation of heaven and earth is also ascribed to other deities, as to Soma and

¹ In one place (vi. 50, 7), the waters are spoken of as mothers (*janitri*) of all things moveable and immoveable. Compare the passages from the Śatapatha Brāhmaṇa in my former article in this Journal, vol. xi, pp. 38 f.

² The phrase is, perhaps, primarily meant as an eulogy of the heaven and earth, by expressing that he must have been a most glorious being who was the author of so glorious a production, as heaven and earth (see Sāyaṇi on It. V, i. 160, 4, who says, "that having in the previous verse magnified the heaven and earth by lauding their son the sun, the poet now magnifies them by exalting their maker.") But it also appears to intimate that, in the idea of the writer, the heaven and earth were, after all, produced by some greater being. In iv. 17, 4, it is similarly said that "the maker of Indra was a most skilful artist."

³ In vii. 59, 5, it is said "If, Indra, a hundred heavens and a hundred earths were thine, a thousand suns could not equal thee, thunderer, nor both world's nature."

⁴ Heaven (Dyaus) is here styled *astuśah*, "the divine," as also in iii. 53, 7.

⁵ It might at first sight appear as if, according to the fourth verse of this hymn (iv. 17, 4), the Heaven, *Dyaus*, was the father of Indra (see Professor Wilson's translation, vol. iii p. 151). But the meaning seems to be "The Heaven esteemed that thy father was the parent of a heroic son—he was a most skilful artist who made Indra, who produced the celestial thunderer, unshaken, as the world cannot be shaken) from its place." This is confirmed by verse 1, which says that the Heaven acknowledged Indra's power; and by verse 2, which represents it as trembling at his birth.

Pûshan (ii. 40, 1); to Soma (ix. 90, 1; ix. 98, 9);¹ to Dhâtr (x. 190, 3); to Hiranyagarbha (x. 121, 9); they are declared to have received their shape from Tvashtṛ, though themselves parents (x. 110, 9); to have sprung respectively from the head and the feet of Purusha (x. 90, 14); and to be sustained or supported by Mitra (iii. 59, 1), by Savitr (iv. 53, 2; x. 149, 1), by Varuṇa (vi. 70, 1; vii. 86, 1; viii. 42, 1), by Indra and Soma (vi. 72, 2), by Soma (ix. 87, 2), by Agni (? x. 31, 8), and by Hiranyagarbha (x. 121, 5). In other passages we encounter various speculations about their origin. In i. 185, 1, the perplexed poet asks, "Which of these two was the first,² and which the last? How have they been produced? Sages, who knows?" In vii. 34, 2, the waters are said to know the birthplace of heaven and earth. In x. 31, 7, the Rishi asks: "What was the forest, what was the tree, from which they fashioned the heaven and the earth, which abide undecaying and perpetual, (whilst) the days and former dawns have disappeared?" This question is repeated in x. 81, 4;³ and in the same hymn (verses 2 and 3) the creation of heaven and earth is ascribed to the sole agency of the god Viṣvakarman.⁴ In x. 72, which will be referred to further on, a different account is given of the origin of heaven and earth. In R.V. x. 129, 1, it is said that originally there was "nothing either non-existent or existent, no atmosphere or sky beyond;" and in Taitt. Br. ii. 2, 2, 1 ff., it is declared, that "formerly nothing existed, neither heaven, nor atmosphere, nor earth," and their formation is described: "That, being non-existent, thought (*mano 'kuruta*), 'Let me become,' " etc.

It is a conception of the Greek, as well as of the oldest Indian, mythology, that the gods were sprung from Heaven and Earth (Ouranos and Gaia). According to Hesiod (Theog. 116 ff.), Chaos first came into existence; then arose "the

¹ The two worlds, *rodasi*, are here styled *devi*, "divine," and *mānavi*, "descended from Manu."

² Sp. Br., xiv. 1, 2, 10, *Iyam pṛthivī bhūtasya prathama-jā*: "This earth is the firstborn of created things."

³ See also the Taitt. Br., vol. ii., p. 360, where the answer is given, "Brahma was the forest, Brahma was that tree."

⁴ See Sanskrit Texts, vol. iv., pp. 4 ff.

broad-bosomed Earth, the firm abode of all things." Heaven and Earth were not, however, according to Hesiod, coeval beings; for "the Earth produced the starry Heaven coextensive with herself, to envelope her on every part." From these two sprang Oceanos, Kronos, the Cyclopes, Rheia, and numerous other children (vv. 132 ff.). From Kronos and Rheia again were produced Zeus, Poseidon, Here, and other deities (vv. 453 ff.¹). The Indian god who is represented in the Veda as the consort of the Earth and the progenitor of the gods, does not, however, as we have seen, bear the same name as the corresponding divinity among the Greeks, but is called *Dyaus*, or *Dyaush pitar*. But this latter name is in its origin identical with Zeus, or Zeus pater, and Jupiter, or Diospiter, the appellations given to the supreme god of the Greeks and Romans, whom Hesiod represents as the grandson of Ouranos. On the other hand, the name of Ouranos corresponds to that of the Indian deity Varuna, who, though he is not considered as the progenitor of the gods, yet coincides with Ouranos in representing the sky.

II. THE INDIAN GODS GENERALLY, AS REPRESENTED IN THE RIG VEDA.

While the gods are in some passages of the Rig Veda represented as the offspring of Heaven and Earth, they are in other places, as we have already seen, characterized as independent of those two divinities, and even as their creators. Before proceeding to offer some description of the powers, functions, characters, history, and mutual relations of these deities, I shall give some account of the general conceptions entertained by the Vedic poets and some later Indian writers, regarding their origin, duration, numbers, and classes.

The following classification of the Vedic gods is adduced by Yaska in his Nirukta, (vii. 5) as being that given by the ancient expositors who preceded him: "There are three deities according to the expounders of the Veda (*Nairuktâh*), viz., Agni, whose place is on the earth; Vâyu, or Indra, whose place is in the atmosphere; and Sûrya (the sun),

¹ Comp. Homer II. xv. 187 ff.

whose place is in the sky.¹ These deities receive severally many appellations, in consequence of their greatness, or of the diversity of their functions, as the names of *hotr*, *adhvaryu*, *brahman*, *udgâtr*, are applied to one and the same person, [according to the particular sacrificial office which he happens to be fulfilling.]² Pursuing the triple classification here indicated, Yâska proceeds in the latter part of his work to divide the different deities, or forms of the same deities, specified in the fifth chapter of the Naighantuka or Vocabulary, which is prefixed to his work, into the three orders of terrestrial (Nirukta vii. 14—ix. 43), intermediate or atmospheric (x. 1—xi. 50), and celestial (xii. 1—46). I shall not reproduce these lists, which could not in some places be thoroughly understood without explanation, as they include several deities whose precise character, and identification with other deities are disputed, and embrace a number of objects which are not gods at all, but are constructively regarded as such from their being addressed in the hymns.³

The gods are spoken of in various texts of the Rig Veda as being thirty-three in number. Thus it is said in R.V. i. 34, 11 : “Come hither, Nâsatyas, Aṣvins, together with the thrice eleven gods,⁴ to drink our nectar.”

¹ Compare R.V. x. 158. 1.

² This passage is quoted more at length in “Sanskrit Texts,” vol. iv. pp. 133 ff.

³ The following is the manner in which Yâska classifies the hymns. I quote the classification as interesting, though unconnected with my present subject :—He divides (Nir. vii. 1) the hymns, or portions of hymns, devoted to the praise of the gods into three classes, viz., (1) those in which the gods are addressed in the third person as absent, as “Indra rules over heaven and earth,” etc. ; (2) those which address them in the second person as present, such as “O Indra, slay thou our enemies,” etc. ; and (3) those in which the author speaks in the first person, and about himself. Of these the first two classes are the most numerous. Again, some of the hymns are merely laudatory (as, “I declare the valorous deeds of Indra”); others contain prayers, not praises, as “may I see clearly with my eyes, be radiant in my face, and hear distinctly with my ears.” Again, there are imprecations, as “may I die to-day, if I am a Yâtudhâna,” etc. Again, a particular state of things is described, as “there was then neither death nor immortality.” Again, a lamentation is uttered, as, “the bright god will fly away and never return.” Or, praise and blame are expressed, as “he who eats alone, is alone in his guilt,” (x. 117. 6), and “the house of the liberal man is like a pond where lotuses grow” (x. 107. 10); and in the same way in the hymn to Dice gambling is reprehended, and agriculture praised. “Thus the views with which the rishis beheld the hymns were very various.”

⁴ That is, as Sâyaṇa explains, those included in the three classes, consisting each of eleven gods, specified in the verse (i. 139. 11), “Ye eleven gods who exist in the sky,” etc.

Again, in i. 45, 2: "Agni, the wise gods lend an ear to their worshipper. God with the ruddy steeds, who lovest praise, bring hither those three and thirty."

i. 139, 11. "Ye gods, who are eleven in the sky, who are eleven on earth, and who in your glory¹ are eleven dwellers in the (atmospheric) waters, do ye welcome this our offering."

viii. 28, 1. "May the three over thirty gods who have visited our sacrificial grass, recognize us, and give us double."²

viii. 30, 2. "Ye who are the three and thirty gods worshipped by Manu, when thus praised, ye become the destroyers of our foes."

viii. 35, 3. "Aśvins, associated with all the thrice eleven gods, with the Waters, the Maruts, the Bhr̥gus, and united with the Dawn and the Sun, drink the Soma."

ix. 92, 4. "O pure Soma, all these gods, thrice eleven in number, are in thy secret," etc.³

This number of thirty-three gods is in the Śatapatha Brāhmaṇa (iv. 5, 7, 2), explained as made up of 8 Vasus, 11 Rudras, and 12 Ādityas, together with Heaven and Earth; or according to another passage (xi. 6, 3, 5), together with Indra and Prajāpati, instead of Heaven and Earth.

This enumeration could not have been the one contemplated in the hymns, as we have seen that one of the texts above quoted (R V. i. 139, 11) assigns eleven deities, who must have been all of the same class, to one of the three spheres sky, atmosphere and earth.⁴ It is also clear that this number of thirty-three gods could not have embraced the whole of the Vedic deities, as in some of the preceding texts Agni, the

¹ On this Sāyana remarks, "Although, according to the text, 'There are only three gods,' (Nirukta, vii. 5), the deities who represent the earth, etc., are but three, and through their greatness, or their respective varied manifestations, they amount to thirty-three according to the saying, 'other manifestations of Him exist in different places.'" Compare Sp. Br. vi. 6, 3, 4, ff.

² Rath says that *double* does not mean, *double*, but *assuredly, especially*.

³ This number of thirty-three gods is referred to in a hymn to the sun in the Mahābhārata iii. 171, as joining in the worship of that deity. *Tryas triṃśach chā eva devāḥ*. See also v. 14019, of the same 3rd book; book iv v. 1769; and book xiii v. 7102. See also the Sp. Br. xii. 8, 3, 29. The Taittiriya Śaṅkha ii. 3, 5, 1, says that Prajāpati had thirty-three daughters, whom he gave in marriage to Soma. See also R V. vii. 39, 9. Vāṅkhyas. 9, 2.

⁴ On this division of the universe into three domains, see the remarks of Prof. Rath in his dissertation on "The Highest Gods of the Aryan Races." Jour. Germ. Or. Society, 1852, p. 68.

Asvins, and the Maruts are separately specified, as if distinct from the thirty-three. Further, Indra could not have been, in the opinion of the author of the Brâhmaṇa, one of the twelve Âdityas (as he was regarded at a later period), since he is separately specified as making up the number of thirty-three gods.

In the R.V. iii. 39, the gods are mentioned as being much more numerous : "Three hundred, three thousand, thirty and nine gods have worshipped Agni,"¹ etc.

In another passage (i. 27, 13) the gods are spoken of as divided into great and small, young and old : "Reverence to the great, reverence to the small : reverence to the young, reverence to the old. Let us worship the gods if we are able ; may I not, O gods, neglect the praise of the greatest."

I am not aware, however, that this latter classification of the gods is alluded to in any other of the hymns.

In the Rig Veda the gods, though spoken of as immortal (as in i. 24, 1 ; i. 72, 2, 10 ; i. 189, 3 ; iii. 21, 1 ; iv. 42, 1 ; x. 13, 1 ; x. 69, 9), are not, as we have already seen, regarded in general as unbeginning or self-existent beings. I have referred above to the passages in which they are described as being the offspring of Heaven and Earth. Varuṇa, Mitra, Aryaman, Bhaga, Daksha, and Anṣa are designated, in R.V. ii. 27, 1, and elsewhere, as Âdityas, or sons of Aditi. The birth of Indra is mentioned in various texts, and his father and mother are alluded to, though not generally named² (iv. 17, 4, 12 ; iv. 18, 5 ; vi. 59, 2 ; viii. 66, 1 ; x. 134, 1 ff.).

In iv. 54, 2, it is said that Savitr bestowed immortality on the gods. I have quoted elsewhere a number of passages

¹ The commentator remarks here that the number of the gods is declared in the Bṛhad Âraṇyaka Upanishad. See pp. 642 ff. of the text of this Upanishad, printed in the Bibl. Ind. ; and pp. 205 ff. of the English translation in the same series. The same passage occurs in nearly the same words in the Śatapatha Brâhmaṇa, xi. 6, 3, 4 ff.

² In R.V. x. 110, 12, a goddess called *Nisṭigṛī* is mentioned, apparently as the mother of Indra : *Nisṭigṛyāḥ putram ā chyāvaya ūtaye Indram*, "draw hither Indra the son of Nisṭigṛī to aid us," etc. Sâyana in this passage identifies her with Aditi, viz. : "She who swallows up her rival wife *Nisṭi*, i.e. Diti." Indra is in fact addressed as an Âditya along with Varuṇa in vii. 85, 4. He is not, however, as we have seen above, considered as such in the Śp. Br. xi. 6, 3, 5, where he is mentioned as distinct from the 12 Âdityas.

from the Śatapatha Brāhmaṇa, in which it is related how they became immortal; and how, though of the same parentage, and originally on a footing of equality, with the Asuras, they became superior to them.¹ (See Sanskrit Texts, iv. 47-53; and the Journal of this Society, vol. xx. pp. 41-5.)

According to the Taittiriya Brāhmaṇa they obtained their divine rank by austerity, *tapasā devā devatām agre āyan* (vol. iii. p. 276). Even in one of the later hymns of the Rīg Veda, Indra is said to have conquered heaven by the same means (x. 167, 1.) This immortality is, however, only a relative one, as according to the Puranic conception the gods are only a portion of the existing system of the universe, and are therefore subject, as regards their corporeal part, to the same law of dissolution as other beings. (See Professor Wilson's Sāṅkhya Kārikā, p. 15). Thus, in a verse quoted in the commentary on the Sāṅkhya Kārikā (See Wilson's S. K. p. 14) it is said: "Many thousands of Indras and of other gods have, through (the power of, time, passed away in every mundane age; for time is hard to overcome." And in the Sāṅkhya Aphorisms, iii. 53, it is said that "the suffering arising from decay and death is common to all;" which the commentator interprets to mean that such suffering is "the common lot of all beings, both those who go upwards and those who go downwards, from Brahmā to things without motion." The souls which have animated the gods, however, like those which animate all other corporeal beings, being eternal and imperishable, must of course survive all such dissolutions, to be either born again in other forms, or become absorbed in the supreme Brahma. (See Wilson's Viṣṇu Pur., p. 632, note 7; and my Sanskrit Texts, iii. 66, where it is shewn, on the authority of the Brahma Sūtras or of Śaṅkara their commentator, that the gods both desire and are capable of final emancipation).

I shall now proceed to give some account of the origin and characters of the other principal deities as represented in the Rīg Veda.

¹ In Śatapatha Brāhmaṇa ii. 4, 2, 1, it is said that all creatures came to Prajāpati, and asked that they might live. To the gods he said, "Sacrifice is your food, immortality is your support, the sun is your light," etc.

(setting?) of the sun." In i. 185, 3, her gifts—pure, unassailable, celestial—are supplicated; and in another place (i. 166, 12) the large blessings conferred by the Maruts are compared to the beneficent deeds of Aditi. In iv. 55, 3, she is styled *Pastyâ*, which Prof. Roth understands to mean a household goddess. In the *Vâj. S.* she is thus celebrated, 21, 5 (=A.V. vii. 6, 2): "Let us invoke to aid us the great mother of the devout, the mistress of the ceremonial, the strong in might, the undecaying, the widely-extended, the protecting, the skilfully guiding Aditi." The following are some of the texts in which she is described as the mother of Varuṇa and the other kindred gods:

viii. 25, 3. "The mother, the great, the holy Aditi, brought forth these twain (Mitra and Varuṇa), the mighty lords of all wealth, that they might exercise divine power."

viii. 47, 9. "May Aditi defend us, may Aditi, the mother of the opulent Mitra, of Aryaman, and of the sinless Varuṇa, grant us protection." See also x. 36, 3, and x. 132, 6.

In R.V. ii. 27, 7, she is styled *rāja-putrā*,¹ "the mother of kings;" in iii. 4, 11, *su-putrā*, "the mother of excellent sons;" in viii. 56, 11, as *ugra-putrā*, "the mother of powerful sons;" and in Atharva Veda, iii. 8, 2; xi. 1, 11, "the divine Aditi, mother of heroes" (*śūra-putrā*). All these epitheta have obviously reference to Varuṇa and the other Ādityas as her offspring.

In the Sāma Veda, the brothers as well as the sons of Aditi appear to be mentioned, i. 299: "May Tvashṭr, Parjanya, and Brahmanaspati [preserve] our divine utterance. May Aditi with (her) sons and brothers preserve our invincible and protective utterance."²

In another passage of the R.V. x. 63, 2, Aditi is thus mentioned, along with the waters, and the earth, as one of the sources from which the gods had been generated: "All your names, ye gods, are to be revered, adored, and worshipped;

¹ In ii. 27, 1, the epithet *rājahyogā*, "kings," is applied to all the six Ādityas there named.

² B. n. 101, B. w. 101, understands the sons and brothers to be those of the worshipped.

ye who were born from Aditi,¹ from the waters, ye who are born from the earth, listen here to my invocation." In this passage we appear to find the same triple classification of gods as celestial, intermediate, and terrestrial, which we have already met with in R.V. i. 139, 11,² and in the Nirukta. The gods mentioned in the verse before us as sprung from Aditi, might thus correspond to the celestial gods, among whom the Âdityas are specified by Yâska as the first class, or to the Âdityas alone.³

The hymn before us proceeds in the next verse (x. 63, 3) "Gladden for our well-being those Âdityas, magnified in hymns, energetic, to whom their mother the sky, Aditi, (or the infinite sky),⁴ dwelling in the aerial mountains, supplies the sweet ambrosial fluid." This verse, in which Aditi is either identified with, or regarded as an epithet of, the sky, appears rather to confirm the view I have taken of the one which precedes. The tenor of R.V. x. 65, 9, quoted in a previous foot-note (²), seems, however, opposed to this identification of Aditi with the sky, as she and her sons the Âdityas are there mentioned separately from the other gods who are the inhabitants of the three different spheres; though the last named classification may be meant to sum up all the gods before enumerated, and so to comprehend the Âdityas also.

But even if we suppose that in the preceding passages it is intended to identify Aditi with the sky, this identification

¹ Roth, in his Lexicon, understands the word Aditi in this passage to mean "infinity," the boundlessness of heaven as opposed to the limitation of earth.

² The same threefold origin of the gods, together with the use of the word "waters," to denote the intermediate region, is found also in x. 49, 2, where it is said: "The gods, both those who are the offspring of the sky, of the earth, and of the [atmospheric] waters, have assigned to me the name of Indra;" and in x. 65, 9, after mentioning Parjanya, Vâta, Indra, Vâyu, Varuṇa, Mitra, and Aryaman, the poet says: "We invoke the divine Âdityas, Aditi, those (gods) who are terrestrial, celestial, who (exist) in the atmospheric waters." The word "waters" is used in the sense of atmosphere, in ii. 38, 11; viii. 43, 2; and x. 45, 1. Compare also vii. 6, 7.

³ Nirukta xii. 35: *Âthâto dyusthânâ devaganûh | teshâm Âdityûh prathamâ-gmînu bhavanti |*

⁴ The word for "sky" here is *Dyaus*, which must therefore be in this passage regarded as feminine, though, as we have seen, it is generally masculine, and designated as *father*. In v. 89, 8, the words *dyaus* and *aditi* are similarly united: *mimatsu dyaur aditiḥ*, etc.

is very far from being consistently maintained in the hymns. And it is equally difficult to take the word as a synonyme of the Earth. For although, as we have seen, Aditi is given in the Nighaṇṭu as one of the names of the Earth, and in the dual as equivalent to Heaven and Earth, and though in R. V. i. 72, 9, and Atharva Veda, xiii. 1, 38, she appears to be identified with the Earth,¹ we find her in many passages of the Rig Veda mentioned separately, and as if she were distinct from both the one and the other. Thus, in iii. 54, 19, 20, it is said: "May the Earth and the Heaven hear us May Aditi with the Âdityas hear us:" v. 46, 3: "I invoke Aditi, Heaven (*svah*), Earth, Sky," etc.; vi. 51, 5: "Father Heaven, beneficent mother Earth be gracious to us; all ye Âdityas, Aditi, united, grant us mighty protection;" ix. 97, 58: "May Mitra, Varuṇa, Aditi, Ocean, Earth, and Heaven increase this to us;" x. 64, 4: "Aditi, Heaven and Earth," etc.; x. 36, 2: "Heaven and Earth, the wise and pious, protect us," etc.; 3: "May Aditi, the mother of Mitra and the opulent Varuṇa, preserve us from every calamity." See also x. 92, 11. The most distinct text of all, however, is x. 63, 10: "(We invoke) the excellent protectress the Earth, the faultless Heaven, the sheltering and guiding Aditi: let us ascend for our well-being the divine bark, well rowed, free from imperfection, which never leaks."² Vāj. S. xviii. 22: "May Earth, and Aditi, and Diti, and Heaven, etc., etc., satisfy him with my sacrifice," etc.

In the Śatapatha Brāhmaṇa, indeed, it is said (ii. 2, 1, 19): "Aditi is this earth; she is this supporter," etc.; and in another passage (v. 3, 1, 4): "Aditi is this earth; she is the wife of the gods." (See also viii. 2, 1, 10; xi. 1, 3, 3). But this seems to be a later view.

I have already mentioned that Aditi is placed by Yāska at the head of the goddesses of the intermediate region. If, however, the same ancient writer has done rightly in

¹ R. V. i. 72, 9 "The earth, the mother, Aditi stood in power with her mighty sons for the support of the bird." The word *aditi* may, however, be here an epithet. A. V. xiii. 1, 38 *Yapōh prthivyā Adityā upanīhe*, etc.

² This verse occurs also in the Vāj. S. xxi. 6; and Ath. V. vii. 6, 3.

placing the Âdityas among the deities of the celestial sphere (Nir. xii. 35), Aditi their mother ought surely to have found her place in the same class, as it is scarcely conceivable that the composers of the hymn should have thought of thus separating the parent from her offspring. But Yâska is here merely following the order of the list of words (for it can hardly be called a classification) which he found in the fifth chapter of the Nighaṇṭu; and in following this list (to which he no doubt attached a certain authority) he has had to specify Varuṇa, who is twice named in it, not only among the celestial gods (xii. 21), among whom as an Âditya he was properly ranked, but also among the gods of the intermediate region¹ (x. 3).

In the following verse Aditi is named along with another goddess or personification, Diti, who, from the formation of her name, appears to be intended as an antithesis, or as a complement, to Aditi (v. 62, 8): "Ye, Mitra and Varuṇa, ascend your car, of golden form at the break of dawn, (your car) with iron supports at the setting² of the sun, and thence ye behold Aditi and Diti."³ Sâyaṇa here understands Aditi of the earth as an indivisible whole, and Diti as representing the separate creatures on its surface. In his essay on "The Highest Gods of the Arian Races" (Journ. Germ. Or. Society, vi. 71), Professor Roth translates these two words by "the eternal," and "the perishable." In his Lexicon, however, the same author (s.r.) describes Diti "as a goddess associated with Aditi, without any distinct conception, and merely, as it appears, as a contrast to her." Aditi may, however, here

¹ Roth, in his remarks on Nir. x. 4. offers the following explanation of this circumstance: "Varuṇa who, of all the gods, ought to have been assigned to the highest sphere, appears here in the middle rank, because, among his creative and regulative functions, the direction of the waters in the heavens is one."

² I here follow Roth, who, in the Journ. Germ. Or. Society, vi. 71. and in his Lexicon, renders the word *aditi* *adityas* here by "setting of the sun." Sâyaṇa goes the length of explaining this phrase by *aparāhṇa*, "afternoon," in his note on v. 76, 8. though not in the passage before us.

³ These two words, *aditi* and *diti*, occur also in a passage of the Vâjasaneyi Sanhitâ (x. 16), which is partly the same as the present. The concluding clause (*tataḥ cāstitatā aditiḥ ditiḥ*) is thus explained by the commentator: "Thence behold 'to Varuṇa and Mitra' the man who is not poor (*aditi*=*adhi*), i.e. who observes the prescribed ordinances, and him who is poor (*diti*=*dhi*), who follows the practices of the atheists."

represent the sky, and Diti the earth; or, if we are right in understanding the verse before us to describe two distinct appearances of Mitra and Varuṇa, one at the rising and the other at the setting of the sun, Aditi might possibly stand for the whole of nature as seen by day, and Diti for the creation as seen by night. At all events the two together appear to be put by the poet for the entire aggregate of visible nature.¹ Diti occurs again as a goddess, but without Aditi, in another place (vii. 15, 12): "You, Agni, and the divine Savitr and Bhaga, (bestow) renown with descendants; and Diti confers what is desirable." Sāyana here explains Diti as meaning a particular goddess. Roth (*s.v.*) considers her to be a personification of liberality or opulence. Diti is also mentioned along with Aditi as a goddess, A.V. xv. 6, 7, and xv. 18, 4; Vāj. S. xviii. 22; and in A.V. vii. 7, 1, her sons are mentioned. These sons, the Daityas, are well known in later Indian mythology as the enemies of the gods.

In the following remarkable verse Aditi embraces and represents the whole of nature. She is the source and substance of all things celestial and intermediate, divine and human, present and future (i. 89, 10): "Aditi is the sky; Aditi is the intermediate firmament; Aditi is the mother, and father, and son; Aditi is all the gods, and the five tribes;² Aditi is whatever has been born; Aditi is whatever shall be born."³

¹ The words *aditi* and *diti* occur together in another passage, iv. 2, 11 (*ditiṁcha rāva aditim uruṣhya*), where Sāyana translates *diti* by "the liberal man," and *aditi* by the *illiberal*, while Roth renders them by "wealth" and "penury" respectively.

² In another place, vi. 61, 11, Aditi is invoked, along with Indra, the earth, the ground (*lakṣma*), Pūshan, Bhaga, and the five tribes (*pañchajanāḥ*), to bestow blessings. Are the "five tribes" to be understood here, and in R V x. 63, 4, 5, with some old commentators (see Nir. iii. 8) of the Gandharvas, Pitṛs, Devas, Asuras, and Rākṣasas, or with the Aitareya Brāhmaṇa quoted by Sāyana on i. 89, 10, of gods, men, Gandharvas, Apsarasas, serpents, and Pitṛs (the Gandharvas and Apsarasas being taken as one class)? Perhaps we should rather understand the term as denoting the whole pantheon, or a particular portion of it. In R V x. 65, 3, *pañcha devāḥ*, the five gods, or classes of gods (?), are mentioned.

³ Professor Roth, in the *Journ. Germ. Or. Society*, vi. 88 f., has the following observations on Aditi and the Ādityas. "There (in the highest heaven) dwell and reign those gods who bear in common the name of Ādityas. We must, however, if we would discover their earliest character, abandon the conceptions which in a later age, and even in that of the heroic poems, were entertained regarding these deities. According to this conception they were twelve sun-gods, bearing evident reference to the twelve months. But for the most ancient period we must

Sāyana states that here Aditi is either the earth, or the mother of the gods, and that she is lauded under the character of universal nature.¹ Yâska says (Nir. iv. 2, 3), that the variety of Aditi's manifestations (*vibhūti*) is here set forth. This text occurs at the end of a hymn addressed to all the gods, and does not appear to have any connexion with the verses which precede, from which it derives no elucidation.²

The signification, "earth" or "nature," may be that in which the word Aditi is employed in R.V. i. 24, 1, 2: "of which god, now, of which of all the immortals, shall we invoke the amiable name? who shall give us back to the great Aditi, that I may behold my father and my mother? 2. Let us invoke the amiable name of the divine Agni, the first of the immortals; he shall give us back to the great Aditi, that I may behold my father and my mother." These words are declared in the Aitareya Brâhmaṇa to have been uttered by Śunahṣepa when he was about to be immolated (see Professor Wilson's Essay in the Journal of this Society, xiii. 100; Professor Roth's paper in Weber's Indische Studien, i. 46). and Müller's Anc. Sansk. Lit. pp. 408 ff.). Whether this be correct or not, the words may be understood as spoken by some one in danger of death from sickness or otherwise, who prayed to be permitted again to behold the

hold fast the primary signification of their name. They are the inviolable, imperishable, eternal beings. Aditi, eternity, or the eternal, is the element which sustains them and is sustained by them. This conception of Aditi, from its nature, has not been carried out into a distinct personification in the Vedas, though the beginnings of such are not wanting, whilst later ages assume without difficulty a goddess Aditi, with the Âdityas for her sons, without seriously enquiring further whence this goddess herself comes."

¹ M. Ad. Regnier, *Étude sur l'idiome des Vedas*, p. 28, remarks: "Aditi is the name of a divinity, a personification of the *All*, the mother of the gods."

² There is a hymn (x. 100)—addressed to different gods, and where they are invoked in succession—in which the words *ā sarvatātīm aditīm vṛṇīmahe* form the conclusion of all the verses except the last. The precise meaning of these words was not very clear to me, especially as they have no necessary connection with the preceding portions of the different stanzas in which they occur. But Professor Aufrecht suggests that the verb *vṛṇīmahe* governs a double accusative, and that the words mean "We ask Aditi for *sarvatātī*," (whatever that may mean). In an ingenious excursus on R.V. i. 94, 15 (*Orient und Occident*, ii. 519 ff.), Professor Benfey regards the word as coming originally from the same root as the Latin *salūt*, of which he supposes the primitive form to have been *salvotāt*, and to have the same signification. This sense certainly suits the context of the four passages on which principally he founds it, viz., i. 106, 2; iii. 54, 11; ix. 96, 4; x. 36, 14. He has not noticed the hymn before us.

face of nature. This interpretation is confirmed by the epithet *mahi*, "great," applied in this verse to Aditi, which would not be so suitable if, with Roth (*s.v.*), we understood the word here in the sense of "freedom" or "security."¹ If we should understand the father and mother whom the suppliant is anxious to behold, as meaning heaven and earth (see above), it would become still more probable that Aditi is to be understood as meaning "nature."

Whatever may be thought of Benfey's interpretation of this word, as given in the last note, the goddess Aditi is undoubtedly in many other texts connected with the idea of deliverance from sin. Thus at the end of this same hymn (i. 24, 15) it is said: "Varuṇa, loose us from the uppermost, the middle, and the lowest bond. Then may we, O Āditya, by thy ordinance, be without sin against Aditi."

The same reference is also found in the following texts:

i. 162, 22: "May Aditi make us sinless."

ii. 27, 14: "Aditi, Mitra, and Varuṇa, be gracious, if we have committed any sin against you."

iv. 12, 4: "Whatever offence we have, through our folly, committed against thee among men, O youngest of the gods, make us free from sin against Aditi, take our sins altogether away, O Agni."

v. 82, 6: "May we be free from sin against Aditi through the impulsion of the divine Savitr."

vii. 87, 7: "May we, fulfilling the ordinances of Aditi, be sinless in Varuṇa, who is gracious even to him who has committed sin."

vii. 93, 7: "Whatever sin we have committed, be thou

¹ Benfey in his translation of the hymn (*Orient und Occident*, i. 33), though he treats Aditi as a proper name, yet explains it as denoting "sinlessness." The abstract noun *adititva* occurs along with *anāghātra*, "sinlessness," in the following line (vii. 51, 1) *anāghātre adititve turāsa mama yajñam dadhataḥ proshamanāh*, "May the mighty gods, listening to us, preserve this ceremony in sinlessness and prosperity." Though *adititva* is joined with *anāghātra*, it does not follow that it must have the same sense. In the *Bṛhad Āraṇyaka Upaniṣad*, p. 63 ff., the name of Aditi is explained from the root *ad*, to eat: "Whatever he created, he began to eat. For Aditi derives her name from this, that she eats every thing." Aditi is an epithet of Agni in R V. iv. 1, 20, vi. 9, 3, and x. 11, 2; of Aryaman in ix. 81, 6, and of Dyauḥ in x. 11, 1. In vii. 52, 1, the worshippers ask that they may be *aditayāh*, which Śāyana renders by *akhaṇḍuniyāh*, "invincible."

(Agni) compassionate : may Aryaman and Aditi remove it from us."

x. 12, 8 : "May Mitra here, may Aditi, may the divine Savitr declare us sinless to Varuṇa."

x. 36, 3 : "May Aditi preserve us from all sin [or calamity]," etc.

In these passages, where Aditi is supplicated for forgiveness of sin, we might suppose that she was regarded as the great power which wields the forces of the universe, and controls the destinies of men by moral laws. But this supposition is weakened by the fact that many others of the gods are in the same way petitioned for pardon, as Savitr (iv. 54, 3) and other deities, as the Sun, Dawn, Heaven and Earth (x. 35, 2, 3), Agni (iii. 54, 19).

Though, as we have seen, Aditi is regarded as the mother of some of the principal Vedic deities, she is yet, in other texts, represented as playing a subordinate part.

Thus, in vii. 38, 4, she is mentioned as celebrating the praises of Savitrī, along with her sons Varuṇa, Mitra, and Aryaman; and in viii. 12, 14, she is declared to have produced a hymn to Indra.

In a hymn of the tenth book (the 72nd), supposed from its contents to be of a comparatively late date, the process of creation is described at greater length than in any earlier passage, and the share which Aditi took in it is not very intelligibly set forth :¹ "1. Let us, in chaunted hymns, with praise, declare the births of the gods,—any of us who in (this) latter age may behold them. 2. Brahmanaspati blew forth these births like a blacksmith. In the earliest age of the gods, the existent sprang from the non-existent. 3. In the first age of the gods, the existent sprang from the non-existent: thereafter the regions sprang, thereafter, from Uttānapad. 4. The earth sprang from Uttānapad, from the earth sprang the regions : Daksha sprang from Aditi, and Aditi from Daksha. 5. For

¹ I have already given this translation in "Sanskrit Texts," vol. iv. pp. 10, 11, but repeat it here, with some variations, for the sake of completeness. See (ibid. p. 12) the explanation of verses 4, 5, given by Professor Roth; and the passage quoted from him above.

Aditi was produced, she who is thy daughter, O Daksha. After her the gods were born, happy, partakers of immortality. 6. When, gods, ye moved, agitated, upon those waters, then a violent dust¹ issued from you, as from dancers. 7. When, gods, ye, like strenuous men,² replenished the worlds, then ye drew forth the sun which was hidden in the (ethereal?) ocean. 8. Of the eight sons³ of Aditi who were born from her body, she approached the gods with seven, and cast out Mārttāṇḍa (the eighth). 9. With seven sons Aditi approached the former generation: she again produced Mārttāṇḍa for birth as well as for death."⁴

Yāska has the following remarks on verse 4 of this hymn in the Nirukta, xi. 23: "Daksha is, they say, an Āditya (or son of Aditi), and is praised among the Ādityas. And Aditi is, on the other hand, the daughter of Daksha (according to this text), '*Daksha sprang from Aditi, and Aditi from Daksha.*' How can this be possible? They may have had the same origin; or, according to the nature of the gods, they may have been born from each other, and have derived their substance from each other."

The concurrence of both Daksha and Aditi in the production of some of the gods is alluded to in two other texts:

x. 5, 7: "Being a thing both non-existent and existent in the highest heaven, in the creation of Daksha and in the womb of Aditi,⁵ Agni is our firstborn of the ceremony," etc.

x. 64, 5: "At the creation, the work of Daksha,⁶ thou, O Aditi, ministerest to the kings Mitra and Varuṇa," etc.

Daksha, though, as we shall see, he is generally regarded as one of the Ādityas, is also (if we are to follow the commentators) sometimes represented as their father, or at least as the father of some of the gods. Thus it is said in vi. 50, 2, "O mighty Sūrya, visit in sinlessness the resplendent gods,

¹ Compare R.V. iv. 42, 5.

² *Yatayah*. See R.V. viii. 6, 18; and Sāma V. ii. 304.

³ Compare A.V. viii. 9, 21 *aṣṭa-yonir Aditir aṣṭa-putrī* |

⁴ The last words seem to refer to the name Mārttāṇḍa, a word compounded of *mārtta*, derived apparently from *mṛta*, "dead," and *aṇḍa*, "an egg," regarded as a place of birth.

⁵ *Dakṣhanya janmann Aditer upasthe*.

⁶ *Dakṣhanya vā Adite janmani orate*.

the sons of Daksha,¹ who have two births, are holy, true, celestial, adorable, and have Agni on their tongues."

vii. 66, 2. "Which two wise gods, the mighty sons of Daksha (*i.e.* Mitra and Varuna) the deities have established to exercise divine rule."²

In the Taittirīya Sanhitā, i. 2, 3, 1 (p. 309 in Bibl. Ind.), the same epithet is applied to the gods: "May those deities who are mind-born, mind-exerting, intelligent, who have Daksha for their father,³ protect and deliver us," etc.

Some doubt may be thrown on the correctness of taking Daksha in the preceding passages to represent a person, from the fact that in R.V. viii. 25, 5, Mitra and Varuna are not only called the "strong sons of Daksha" (*sānā Dakshasya sukratū*), but also the "grandsons of mighty strength" (*napātā śavaso mahah*). But even if the word Daksha be taken figuratively in this passage, it may represent a person in the others; for there is no doubt that Daksha is sometimes a proper name, whilst this is never the case, so far as I know, with *śavas*. There is another obscure passage (iii. 27, 9, 10 = S.V. ii. 827) in which Daksha may be a proper name.

In the Śatapatha Brāhmaṇa, ii. 4, 4, 2, Daksha is identified with Prajâpati, or the creator.⁴

The part which he plays in the later mythology may be seen by consulting Prof. Wilson's Vishnu Purāṇa, pp. 49, 54 ff., 115-122, and 348. According to the first account he is one of Brahmâ's mind-born sons (p. 49), and marries Prasûti (p. 54), who bears to him twenty-four daughters, among whom Aditi is not specified. In the second account,

¹ The word so rendered is *Daksha-pitarah*, "having Daksha for their father." Sâyana explains it as meaning "those who have Daksha for their forefather."

² Sâyana here departs from the interpretation he had given on vi. 50, 2, and explains *Daksha-pitarā* as = *balasya pâlakau svâminau vâ*, "preservers, or lords, of strength."

³ The commentator explains the word *Daksha-pitârah* as = *Dakshah prajâpatir utpâdako yeshâm te*, those of whom the Prajâpati Daksha is the generator. The meaning of *Daksha-pitarah* in R.V. viii. 52, 10 is not very clear. Sâyana takes it to mean the preservers or lords of food. It may, however, be taken as a vocative, and applied to the gods. The word also occurs in Vâj. S. xiv. 3, where the commentator understands it to signify *virasya pâlavitri*, "preserver of strength."

⁴ See the paper in a former vol. of this Journal, xx. 40. In the sequel of the passage in the Ś. P. Br. ii. 4, 4, 6, a person named Daksha, the son of Parvata, is mentioned.

however, (p. 122) Aditi is mentioned as one of his sixty daughters who, along with Diti, Danu, and ten others, is said to have been given in marriage to Kasyapa, to whom she (Aditi) bore the twelve Âdityas. According to the third account (p. 348), Aditi is said to be the daughter of Daksha, and the mother of Vivasvat, the Sun. In a passage in one of the recensions of the Rāmāyaṇa (Schlegel, i. 31, Calc. ed. i. 29), in the Mahābhārata, and in the Bhāgavata Purāṇa, viii. 16, 1 ff., Aditi is described as the wife of Kasyapa, and the mother of Viṣṇu in his dwarf incarnation. (See Sanskrit Texts, iv. 116 ff.)

An older authority, however, the Vājasaneyi Sanhitā, gives quite a different account of the relation of Aditi to Viṣṇu, as it (xxix. 60) represents her to be his wife (*Adityai Viṣṇu-patnyai charuḥ*).

IV. THE ÂDITYAS.

The sons of Aditi specified in R.V. ii. 27, 1, are these six : Mitra, Aryaman, Bhaga, Varuṇa, Daksha, and Anṣa. In ix. 114, 3, the Âdityas are spoken of as seven in number but their names are not mentioned.¹ In x. 72, 8, 9, already cited above, it is declared that Aditi had eight sons, of whom she only presented seven to the gods, casting out Mārttāṇḍa, the eighth, though she is said to have afterwards brought him forward. Here, again, the names of the rest are omitted. Sūrya is, however, spoken of as an Âditya in R.V. i. 50, 12; i. 191, 9; viii. 90, 11, 12;² and as an Âditeya (this word equally means 'son of Aditi'), identified with Agni, he is said (x. 88, 11),³ to have been placed by the gods in the sky. In viii. 18, 3, Savitr is named along with Bhaga, Varuṇa, Mitra, and Aryaman, four of the Âdityas, after that

¹ See Sanskrit Texts, iv. 101 ff., where these and many other passages relating to the Âdityas are quoted.

² The last-mentioned text is as follows *Boṇ mahān aṣi Sūrya boḥ Âditya mahān aṣi |* *Boḥ Sūrya gṛayaṁ mahān aṣi |* "O great art thou, Sūrya! O son of Aditi, thou art great! . . . O Sūrya, in renown thou art great," etc.

³ *Tadāś caṁaś oḍadhur yaṇyāśāś dīś dēvāś Sūryam Âdityam.* In x. 37, 1, however, the Sun is called the Son of the Heaven (*dīśāś putrāś*); and there as well as elsewhere he is called the eye of Mitra and Varuṇa.

class of deities, had been celebrated generally in the preceding verse. Sûrya or Savitr therefore appears to have a certain claim to be considered the seventh Âditya (compare A.V. xiii. 2, 9, and 37, where the sun is called the son of Aditi). We have seen above that Indra also is in one passage (vii. 85, 4), addressed as an Âditya along with Varuṇa.

In the Taittirīya Veda (quoted by Sâyaṇa on R.V. ii. 27, 1) the Âdityas are said to be eight in number: Mitra, Varuṇa, Dhâtr, Aryaman, Ansu, Bhaga, Indra, and Vivasvat. Here five names correspond with those given in R.V. ii. 27, 1, while Dhâtr is substituted for Daksha, who is omitted, and two names are added, Vivasvat (who may be identified with Sûrya) and Indra. In one place (iii. 1, 3, 3) the Śatapatha Brâhmaṇa speaks of the Âdityas as eight; but in two other passages (vi. 1, 2, 8; xi. 6, 3, 8) as being twelve in number. In the first of these two latter texts they are said to have sprung from twelve drops generated by Prajâpati (in which case they could not have been sons of Aditi), and in the second they are identified with the twelve months.¹ In the later Indian literature they are always said to be twelve (see the passages quoted in "Sanskrit Texts," iv. 101-106).

In some of the hymns where the Âdityas are celebrated, they are characterized by the epithets "bright," "golden," "pure," "sinless," "blameless," "holy," "strong," (*kshatriyâḥ*, viii. 56, 1), "kings," "resistless," "vast," (*uravaḥ*) "deep," (*gabhtrâḥ*) "sleepless," "unwinking,"² "many-eyed," (*bhûryakshâḥ*), "far-observing," "fixed in their purpose." Distant things are near to them, they uphold and preserve the worlds, they see the good and evil in men's hearts, they punish sin (ii. 29, 5), and spread nooses for their enemies (ii. 27, 16).³ They are supplicated for various boons, for pro-

¹ In the Ś. P. Br. iii. 5, 1, 13, a dispute between the Âdityas and Angirases regarding a sacrifice is mentioned. In the same work, xii. 2, 2, 9, it is said that these two classes of beings (the Âdityas and Angirases) were both descendants of Prajâpati, and that they strove together for the priority in ascending to heaven. In A.V. xii. 3, 43 f., and xix. 39, 5 also they are connected with one another.

² This is a characteristic of the gods in general.

³ In regard to these deities, Roth thus expresses himself in the Journ. of the-

tection, offspring, guidance, light, forgiveness, etc. (see especially R.V. ii. 27, 1-16).

The Âdityas regarded as a class of gods are not, however, characterized so specifically in the hymns, as some of the individual deities who bear that general designation, such as Varuṇa and Mitra; and I shall therefore proceed to give some account of the two latter, (with whose names that of Aryaman is sometimes associated), omitting any further reference to Bhaga and Anṣa, who are rarely mentioned, and to Dakṣha, of whom something has been already said. Sârya and Savitr will be treated separately.

V. MITRA AND VARUṆA.

These two deities are very frequently found in conjunction. Varuṇa is also often separately celebrated; Mitra but seldom. Their frequent association is easily explained if the commentators are right in understanding Mitra to represent the day, and Varuṇa the night. Thus, Sâyaṇa says on R.V. i. 89, 3: "Mitra is the god who presides over the day, according to the Vedic text, 'the day is Mitra's;'" and again, "Varuṇa is derived from the root *vr*, to cover; he envelops the wicked in his snares; and is the god who rules over the night, according to the text, 'the night is Varuṇa's.'"¹ In the same way the commentator on the Taittiriya Sanhitâ, i. 8, 16, 1 (Bibl. Ind. vol. ii. p. 164) affirms that the "word Mitra denotes the sun," and that the "word Varuṇa signifies one who

Germ. Or. Society, vi. 69 "The eternal and inviolable element in which the Âdityas dwell, and which forms their essence, is the celestial light. The Âdityas, the gods of this light, do not therefore by any means coincide with any of the forms in which light is manifested in the universe. They are neither sun, nor moon, nor stars, nor dawn, but the eternal sustainers of this luminous life, which exists as it were behind all these phenomena."

See also his note on i. 141, 9, where he gives the same explanation regarding Mitra and Varuṇa, and adds that Aryaman is the god who goes between the other two. According to his note on i. 96, 1, Aryaman is the god who makes the division of day and night. Compare also his note on ii. 38, 8, where he says that Varuṇa is represented as giving resting-places to creatures after sunset, because he carries on the affairs of the night (*patreṇa nirvāhate it*). In i. 35, 1, Mitra and Varuṇa are invoked along with Agni, Night and Savitr. "I invoke first Agni for our welfare, I invoke his her Mitra and Varuṇa to our aid, I invoke Night who gives rest to the world, I invoke the divine Savitr to our assistance." See also what is said of Mitra awakening men, in iii. 59, 1, which will be quoted below.

envelops like darkness, according to the text (of the Taittirîya Brâhmaṇa, i. 7, 10, 1, vol. i. p. 153) 'the day is Mitra's and the night is Varuṇa's.' In R.V. viii. 41, 3, it is said of the latter, "The beautiful god has embraced the nights, by his wisdom he has established the days, and everything perfectly." In another place (on R.V. vii. 87, 1) Sâyaṇa says that it is the setting sun which is called Varuṇa.

The following are some of the principal characteristics of these gods, as represented in the Rig Veda. Varuṇa is sometimes, at least, visible to his worshippers. Thus, in i. 25, 18, the rishi says: "I beheld him who is visible to all; I beheld his chariot upon the ground." In vii. 88, 2, also, the poet exclaims: "When I have obtained a vision of Varuṇa, I have regarded his lustre as resembling that of Agni."¹ Mighty and fixed in purpose, he sits in his abode exercising sovereignty (i. 25, 10). He is arrayed in golden mail,² and surrounded by his messengers or angels, *spāṣaḥ* (v. 13). His house is said to have a thousand doors (vii. 88, 5). Again he is described as occupying, along with Mitra, a palace supported by a thousand columns³ (ii. 41, 5; v. 62, 6). The two deities ascend their chariot, which is drawn by horses and is golden-coloured at the break of day, and takes the hue of iron at the setting of the sun.⁴ Mounted on their car, and soaring in the highest empyrean, they behold all things in heaven and earth (v. 62, 4, 8; v. 63, 1). Varuṇa is said to be farsighted (i. 25, 5, 16; viii. 90, 2); and thousand-eyed (vii. 34, 10). The sun is called his golden-winged messenger (x. 123, 6), or in other places, the eye of Mitra and Varuṇa (vii. 61, 1; vii. 63, 1; x. 37, 1), just as the same luminary is said by Hesiod (Opp. et Dies, 265) to be the eye of Jupiter,⁵ Πάντα ἰδὼν Διὸς ὀφθαλμὸς καὶ πάντα νοήσας. Along with

¹ See Roth's article on "The highest gods of the Arian races." Journ. Germ. Or. Society, vi. 71.

² Golden mail is also assigned to Savitr (iv. 53, 2).

³ Compare Ovid. Met. ii. 1 ff. Regia Solis erat sublimibus alta columnis, etc.

⁴ I follow Roth here in understanding *udītā sūryasya* not of the *rising* (as the phrase generally means), but of the *setting* of the sun. It is thus only that the iron colour of the chariot becomes intelligible.

⁵ See Max Müller's Essay on Comp. Mythol. in the Oxford Essays for 1856, p. 53.

Aryaman, another of the Âdityas, these two gods are called sun-eyed (vii. 66, 10). They are also denominated *supānti*, the beautiful or skilful-handed. Varuṇa is frequently spoken of as a king (i. 24, 7, 8; ii. 7, 4; iv. 1, 2; v. 40, 7; vii. 64, 1; x. 103, 9; x. 173, 5); as king of all (x. 132, 4); as king of all, both gods and men (ii. 27, 10); as king of the universe (v. 85, 3), and of all that exists (vii. 87, 6); as an universal monarch, *samrāt* (i. 25, 10; ii. 28, 6; v. 85, 1; vi. 68, 9; viii. 42, 1); as a self-dependent ruler, *svarāt* (ii. 28, 1). The same epithets of king and universal monarch are also applied in other places to Mitra and Varuṇa conjointly (as in i. 71, 9; i. 136, 1, 4; i. 137, 1; ii. 28, 9; v. 62, 6; v. 63, 2, 3, 5, 7; v. 65, 2; v. 68, 2; vii. 64, 2; viii. 23, 30; viii. 25, 4, 7, 8; viii. 90, 2; x. 65, 5).¹

Power, martial strength, or sovereign authority, *kshattrā*, is also constantly predicated of one or both of these deities; and they as well as the Âdityas generally are denominated the strong, or martial, gods, *kshattriyāḥ* (as in i. 24, 6; i. 25, 5; i. 136, 1; v. 66, 3; v. 67, 1; v. 68, 1, 3; vi. 49, 1; vi. 51, 10; vi. 67, 5, 6; vii. 34, 11; vii. 64, 2; viii. 25, 8; viii. 56, 1; viii. 90, 5). They are also designated as *rudrāḥ*, the terrible (v. 70, 2, 3); as *asurāḥ*, the divine (vii. 36, 2; viii. 25, 4); as the divine and lordly deities (*asurā tāv aryā*) among the gods (vii. 65, 2). The epithet *asura*, divine, is frequently applied to Varuṇa in particular (as in i. 24, 14; ii. 27, 10; v. 85, 5; viii. 42, 1), though it is also given to other deities of the Vedic pantheon.

Another word employed to express their divine power, or wisdom, is *māyā*; and Varuṇa is sometimes called the *māyin*, the possessor of this attribute (vi. 48, 14; vii. 28, 4; x. 99, 10; x. 147, 5). While in some places (iii. 61, 7; v. 63, 4) this quality (*māyā*) is ascribed to the two deities themselves, in other verses of the last quoted hymn (v. 63, 3, 7) they are said to cause the heaven to rain, and to uphold their ordi-

¹ The same deities with Aryaman are called kings in i. 41, 3, and kings of men (*rājanaḥ charaṇanām*) in x. 26, 6. In vii. 66, 11, it is said. "The kings Mitra, Varuṇa, and Aryaman, who established the year, the month, and the day, etc. enjoy unrivalled dominion (*kshattrā*).

~~through~~ through the power (*mâyâ*) of the divine being ~~asura~~. It might appear as if the word *asura* denoted here ~~the great~~ Being distinct from, and superior to, Mitra and Varuna through whose strength they acted; but in another hymn (v. 83, 5, 6) the term *asura* is distinctly used as an epithet of Varuna himself.

The grandest cosmical functions are ascribed to Varuna. Possessed of illimitable resources, this divine being has meted out, created, and upholds, heaven and earth; he dwells in all worlds as sovereign ruler; indeed, the three worlds are embraced within him (iv. 42, 3, 4; vi. 70, 1; vii. 86, 1; vii. 87, 5, 6; viii. 41, 4, 5, 10; viii. 42, 1). The wind which resounds through the atmosphere is his breath (vii. 87, 2). He has opened boundless paths for the sun,¹ which he placed in the heavens, and has hollowed out channels for the rivers, which flow by his command (i. 24, 8; ii. 28, 4; vii. 87, 5). By his wonderful contrivance the rivers pour their waters into the one ocean, but never fill it.² His ordinances are fixed and unassailable.³ They rest on him, unshaken, as upon a mountain; through their operation, the moon walks in brightness, and the stars which appear in the nightly sky mysteriously vanish in daylight (i. 24, 10; i. 25, 6, 10; i. 44, 14; i. 141, 9; ii. 1, 4; ii. 28, 8; iii. 54, 18; viii. 25, 2). Neither the birds flying in the air, nor the rivers in their sleepless flow, can attain a knowledge of his power or his wrath (i. 24, 6). His messengers behold both worlds (vii. 87, 3).⁴ He knows the flight of birds in the sky, the path of ships on the ocean, the course of the far-travelling wind, and beholds all the secret things that have been, or shall be done (i. 25, 7, 9, 11). No creature can even wink without him

¹ In vii. 60, 4, Mitra, Varuna, and Aryaman are said to open out paths for the sun.

² See Roth on "The highest gods of the Arian races," p. 71; and Illustrations of Nirukta, p. 78. Compare Ecclesiastes, i. 7: "All the rivers run into the sea; yet the sea is not full: unto the place from whence the rivers come, thither they return again."

³ See Roth in the Journ. Amer. Or. Society, iii. 341; and Müller's Anc. Sansk. Lit. p. 534, note 2.

⁴ The alert and invincible messengers of Mitra and Varuna are also mentioned in vi. 67, 5. The same word *spas* is used in i. 33, 8, where Indra's messengers seem to be spoken of.

(ii. 28, 6). He witnesses men's truth and falsehood (vii. 49, 3). He instructs the rishi Vasishṭha in mysteries (vii. 87, 4). In the sixteenth hymn of the fourth book of the Atharva Veda, his power and his omniscience are thus celebrated :

"1. The great One who rules over these worlds beholds (all) as if he were close at hand. When any man thinks he is doing aught by stealth, the gods know it all; 2. (and they perceive) every one who stands, or walks, or glides along secretly, or withdraws into his house, or into any lurking-place. Whatever two persons, sitting together, devise, Varuṇa the king knows it, (being present there as) a third.¹ 3. This earth, too, belongs to Varuṇa the king, and that vast sky whose ends are so far off. The two seas [the ocean and the atmosphere]² are Varuṇa's loins; he resides in this small pool of water. 4. He who should flee far beyond the sky, would not there escape from Varuṇa the king.³ His messengers, descending from heaven, traverse this world; thousand-eyed, they look across the whole earth. 5. King Varuṇa perceives all that exists within, as well as beyond, heaven and earth. The winkings of men's eyes are all numbered by him.⁴ He moves (all) these (things) as a gamester throws his dice. 6. May thy destructive nooses, O Varuṇa, which are cast seven-fold, and three-fold, ensnare the man who speaks lies, and pass by him who speaks truth."⁵

Varuṇa is supposed to have unlimited control over the destinies of mankind. He is said to have a hundred, a thousand remedies; is continually supplicated to drive away evil (*nirrti*) and sin (i. 24, 9); to forgive sin (ii. 28, 5, 7, 9;

¹ In R.V. x. 11, 1, Agni is compared to Varuṇa in omniscience, which seems to show that this is an attribute in which Varuṇa was regarded as pre-eminent. With verses 1 and 2, compare Psalm cxxxix. 1-4, and St. Matthew xviii. 20.

² Compare Genesis, i. 7, and Psalm cxxviii. 4.

³ With this verse compare verses 7-10 of the Psalm just referred to.

⁴ Compare St. Matthew, x. 30.

⁵ The Hymn is concluded by two verses, containing imprecations. After giving a German translation of the whole in his Dissertation on the Atharva Veda, page 19 f. (Tübingen, 1856) Professor Roth remarks as follows: "There is no Hymn in the whole Vedic literature which expresses the divine omniscience in such forcible terms as this, and yet this beautiful description has been degraded into an introduction to an imprecation. But in this, as in many other passages of this Veda, it is natural to conjecture that existing fragments of older hymns have been used to deck out magical formulas. The first five, or even six verses of this hymn might be regarded as a fragment of this sort."

v. 85, 7, 8); he is entreated not to steal away, but to prolong, life (i. 24, 11; i. 25, 12); and to spare the suppliant who daily transgresses his laws (i. 25, 1, 2). In many places mention is made of the bonds, or nooses, with which he seizes and punishes transgressors (i. 24, 15; i. 25, 21; vi. 74, 4; x. 85, 24). Mitra and Varuṇa conjointly are spoken of in one passage (vii. 7, 65, 2) as armed with many nooses for falsehood (*bhūripāśā anṛtasya*); and in another place (vii. 84, 2) Indra and Varuṇa are described as binding with bonds not formed of rope (*setṛbhir arajjubhiḥ sinthah*); on the other hand Varuṇa is said to be gracious even to him who has committed sin (vii. 87, 7). He is the wise guardian of immortality (*amṛtasya gopā*); he and Yama living in self-dependent blessedness will be beheld in the next world by the departed (x. 14, 7).¹

That Varuṇa, far more than any other god, was regarded as possessing a high moral character, as well as a placable disposition, appears not only from the passages to which I have already referred, but also from the two hymns (vii. 86, and vii. 89) translated by Prof. Müller in his *Anc. Sansk. Lit.* pp. 540 f.; in which the worshipper, while palliating his sins, implores the god's forgiveness, and entreats that his life may be spared.² In another place (vii. 88, 4 ff) the same rishi alludes to his previous friendship with Varuṇa, and to the favours the god had formerly conferred upon him, and enquires why they had now ceased:—"Varuṇa placed Vasishṭha on his boat: by his power the wise and mighty deity made

¹ In the *Journal of the German Oriental Society* for 1855, pp. 237 ff., Prof. Weber communicates from the *Śatapatha Brāhmaṇa* (xi. 6, 1, 1 ff.) a legend regarding Varuṇa and his son Bhṛgu. The latter had esteemed himself superior to his father in wisdom, and was desired by him to visit the four points of the compass, where he witnesses certain visions of retribution in the other world. Prof. Weber accompanies this legend with some very interesting remarks. Among other things, he observes that the legend is shewn to be ancient from the high position which it assigns to Varuṇa, who appears to be conceived as the lord of the universe, seated in the midst of heaven, from which he surveys the places of punishment situated all round him. Varuṇa, he adds, is represented in the *Śatapatha Brāhmaṇa* xiii. 3, 6, 5, as having the form of a fair, bald, toothless, (with projecting teeth?), and yellow-eyed old man.

² On the character of Varuṇa as a moral governor, see Roth, *Journ. Germ. Or. Society*, vi. 71 ff.; a paper by the same author in the *Journ. Amer. Or. Society*, iii. 340 ff.; and his reply to Weber in the *Journ. Germ. Or. Society*, vii. 607.

him a *rishi* to offer praise in an auspicious period of his days, that his days and dawns might be prolonged. 5. Where¹ are those friendships of us two? Let us seek the peace which (we enjoyed) of old. I have gone, O self-sustaining Varuṇa, to thy vast and spacious house with a thousand gates. 6. He who was thy friend, intimate, constant, and beloved has committed offences against thee. Let not us who are guilty reap the fruits of our sin. Do thou, a wise god, grant protection to him who praises thee."

The same or nearly the same functions and attributes as are ascribed to Varuṇa are also attributed to him and Mitra conjointly. They uphold and rule over the earth and sky, the shining and the terrestrial regions, and place the sun in the heavens (v. 62, 3; v. 69, 1, 4; v. 63, 7; x. 132, 2; vi. 67, 5; vii. 61, 4). They are the guardians of the world (v. 62, 9; vii. 51, 2; viii. 25, 1; x. 126, 4). By their ordinance the great sky shines (x. 65, 5). They discharge the rain (v. 62, 3; v. 63, 1-3). Their godhead is beyond the ken of the skies, or of rivers (i. 159, 9). They (together with Aryaman) are awful deities, haters and dispellers of falsehood (i. 152, 1; ii. 27, 8; vii. 66, 13). They are guardians of sacred rites (v. 63, 1; vii. 64, 2). They carry out their fixed purposes, which are unobstructed even by the immortal gods (v. 63, 7; v. 69, 4). They make the foolish wise (vii. 60, 6, 7); they know heaven and earth (vii. 60, 7). They are described as righteous, and as promoters of religious rites (or truth or righteousness), *ṛtāvrdhā*, *ṛtāvanā*, *ṛta-prṣā*, *ṛtasya gopau* (i. 2, 8; i. 23, 5; i. 136, 4; ii. 27, 4; v. 63, 1; v. 65, 2; v. 67, 4; vii. 66, 13; viii. 23, 30; viii. 25, 8), as the lords of truth and light (i. 23, 5). They avenge sin and falsehood (ii. 27, 4; vii. 60, 5); the man who neglects their worship is seized with consumption (i. 122, 9). They are besought along with Aditi to remove the trespasses of their worshippers (ii. 27, 14); and along with Aryaman to give deliverance (x. 126, *passim*).²

¹ Compare Psalm lxxix. 49.

² Like other gods, and in particular Indra, they are represented as drinking the soma juice, i. 136, 4; i. 137, 1 ff.; iv. 41, 3; iv. 42, 6; v. 64, 7; v. 71, 3; v. 72, 1-3; vi. 68, 10.

Mitra alone is celebrated in iii. 59. The following are some of the verses:—1. “Mitra, uttering his voice, calls men to activity.¹ Mitra sustains the earth and the sky. Mitra with unwinking eye beholds (all) creatures. Offer to Mitra the oblation with butter. 2. Mitra, son of Aditi, may the mortal who worships thee with sacred rites, have food. He who is protected by thee is neither slain nor conquered. Calamity does not reach him from near or from far. 4. This Mitra, adorable, auspicious, a king, strong, and wise, has been born. May we abide in the favour and kindness of this, object of our worship. This great Âditya, who rouses men to exertion (see v. 1), who is favourable to his worshipper, is to be approached with reverence. 7. Mitra who by his greatness transcends the sky, and the earth by his renown. 8. The five classes of men have done homage to Mitra the powerful helper, who sustains all the gods.”

In his paper on “The highest gods of the Arian races” (*Journal of the German Oriental Society*, vi. p. 70 f.), Prof. Roth has the following ingenious and interesting observations on Mitra and Varuṇa:—“Within the circle of the Âdityas there subsists the closest connection between Mitra and Varuṇa, who are invoked more frequently together than Varuṇa is invoked singly. We find only one hymn in which Mitra is invoked by himself (iii. 59). The fact that this dual invocation is preserved in the *Zend Avesta*, in regard to Ahura and Mithra, though the position of both has become entirely altered, and Mithra is not even reckoned among the Amshaspands,—this fact proves how close the ancient connection of the two was, when it has been maintained even after the reason for it had ceased. The essential character of the two gods, as distinguished from one another, is nowhere distinctly expressed in the hymns, and was in fact originally one which could not be defined, with intellectual precision. But the stage of religious

¹ With this verse Roth (*Illustrations of Nirukta*, x. 22, p. 140) compares R. V. v. 82, 9, where it is said, “Savitr, who causes all creatures to hear his sound, and impels them.” Comp. v. 5 of the present hymn; and vii. 36, 2, referred to by Roth in the passage about to be quoted from him.

culture which lies before us in the Rig Veda, enables us to distinguish this difference as one already existing, viz., that Mitra is the celestial light in its manifestation by day, while Varuṇa, though the lord of all light and of all time, yet rules especially over the nightly heaven. A hymn of Vasishṭha (vii. 36, 2) says: 'One of you (Varuṇa) is the lord, and unassailable guide, and he who is called Mitra, (*i.e.* the friend) calls men to activity.' Here so much at least is declared (and the same thing is expressed in nearly the same words in other places), that the light of day, which awakens life, and brings joy and activity into the world, is the narrower sphere of Mitra's power; though, however, Varuṇa is not thereby relegated to the night alone, for he continues to be the lord and the first.

"Though therefore such representations as are expressed in Indian exegesis, (as for instance, when Sâyaṇa says on R. V. vii. 87, 1, that Varuṇa is the setting sun), are far too narrow and one-sided, they still contain some truth; and we may guess by what process they are to be developed. If Varuṇa is, as his name shews, that one among the lucid Ādityas whose seat and sphere of authority is the bright heaven, in whose bosom is embraced all that lives, and therefore also the remotest boundary, beyond which human thought seeks nothing further, then is he also one who can scarcely be attained either by the eye or by the imagination. By day the power of vision cannot discover this remotest limit, the bright heaven presents to it no resting place. But at night this veil of the world, in which Varuṇa is enthroned, appears to approach nearer, and becomes perceptible, for the eye finds a limit. Varuṇa is closer to men. Besides, the other divine forms which, in the clouds, the atmosphere, the rays of light, filled the space between the earth and yonder immeasurable outermost sphere, have disappeared: no other god now stands between Varuṇa and the mortal who gazes at him."

Whatever may be the success of the attempts made to identify any other of the Indian and Iranian gods with one another, there can at least be no doubt, from the correspondence of the two names, that the Vedic Mitra and the Mithra

of the Zend Avesta were originally the same deity. Accordingly, the late Dr. F. Windischmann, in his Dissertation on the Persian Mithra,¹ regards it as established that this god was known to the old Arian race before the separation of its Iranian from its Indian branch, though the conception of his character was subsequently modified by Zoroastrian ideas. That Mithra was worshipped in Persia in and previous to the age of Herodotus, is proved, as Windischmann remarks, by the common use of such names as Mitradataes and Mitrobates. Herodotus himself (i. 131) speaks of Mitra, not as a god, but as a goddess. But Xenophon (Cyrop. viii. 5, 53; Œc. iv. 24), and Plutarch (Artax. 4, and Alexand. 30) describes the Persians as swearing by the god Mitra. And Plutarch, in his treatise on Isis and Osiris, chap. xlvi., tells us that Zoroaster conceived of Mithra as standing intermediate between the deities Oromazes, the representative of light, and Areimanius, the representative of darkness and ignorance.² It is unnecessary to say anything further here of the Persian Mithra, the eventual introduction of whose worship into the West is matter of history.

Though Varuṇa is not generally regarded in the Rig Veda as the god of the ocean, he is yet, in the following passages, connected with the element of water, either in the atmosphere or on the earth, in such a way as may have led to the conception of him which is fully established in the later mythology.

i. 161, 14 : “Desiring you, ye sons of strength, the Maruts proceed through the sky, Agni along the earth, this Vâta (wind) through the atmosphere, and Varuṇa along the waters, the ocean” (*adbhiḥ samudraiḥ*).

vii. 49, 2 : “May the waters which are celestial, and those which flow, those which are dug up, and those which are self-produced, those which seek the ocean and are bright and purifying, preserve me ! 3. May those (waters) in the midst of which king Varuṇa goes, beholding the truth and false-

¹ Mithra, ein Beitrag zur Mythengeschichte des Orients, in the Abhandlungen für die Kunde des Morgenlandes, Leipzig, 1857. See pp. 54 ff.

² Ibid, p. 56. This passage is also quoted, Sanskrit Texts, ii., 471.

hood of men, which drop sweetness and are bright and purifying, preserve me!"

vii. 64, 2: "Mitra and Varuṇa, ye two kings, protectors of the ceremonial, lords of the sea (or of rivers *sindhu-pati*), come hither; send us food and rain from the sky," etc.

In viii. 41, 8, Varuṇa appears to be called a hidden ocean (*samudro aptchyah*).

viii. 58, 12: "Thou art a glorious god, Varuṇa, into whose jaws the seven rivers flow, as into a surging abyss."¹

Varuṇa is also connected with the sea or with the rivers in ix. 73, 3; ix. 90, 2; ix. 95, 4; and in Vāj. Sanh. x. 7, it is said that "Varuṇa, the child of the waters, made his abode within the most motherly waters as in his home." See also the third verse of the sixteenth hymn of the A. V. quoted above.

Prof. Roth gives (in the Journal of the German Oriental Society, vi. 73) the following statement of the process by which he conceives that Varuṇa came in later times to be regarded as the god of the sea.

"The hymns of the Veda give already indications of this development, since Varuṇa is in one place brought into the same connection with the waves of the sea, as Storm and Wind are with the atmosphere and the heaven, and as Agni is with the earth (i. 161, 14, translated above), and it is elsewhere said of him that he sinks into the sea (vii. 87, 6), while in another passage the rivers are described as streaming towards him (viii. 58, 12). When on the one hand the conception of Varuṇa as the all-embracing heaven had been established, and on the other hand the observation of the rivers flowing towards the ends of the earth and to the sea, had led to the conjecture that there existed an ocean enclosing the earth in its bosom—then the way was thoroughly prepared for connecting Varuṇa with the ocean. Another side of the affinity between the celestial and oceanic Varuṇa may be expressed in the words of Alexander von Humboldt, which perfectly coincide with the ancient Indian view: 'The two envelopments of the solid surface of our planet, viz., the aqueous and

¹ See Roth's Illustrations of Nirukta, pp. 70 f.

the atmospheric, offer many analogies to each other, in their mobility, in the phenomena of their temperature, and in the fact that their parts admit of being displaced: the depth both of the ocean and of the atmosphere is unknown to us.'"

We have already seen that Varuṇa corresponds in name to the 'Ουρανός of the Greeks. "Uranos," as Prof. Müller observes,¹ "in the language of Hesiod, is used as a name for the sky; he is made or born that he should 'be a firm place for the blessed gods.'"² It is said twice that Uranos covers everything (v. 127), and that when he brings the night, he is stretched out everywhere, embracing the earth.³ This sounds almost as if the Greek mythe had still preserved a recollection of the etymological power of Uranos. For Uranos is the Sanskrit Varuṇa, and is derived from a root, *var*, to cover," etc.

The parallel between the Greek Uranos and the Indian Varuṇa does not, as we have already seen, hold in all points. There is not in the Vedic mythology any special relation between Varuṇa and Pṛthivî, the earth, as husband and wife, as there is between Uranos and Gaia in the theogony of Hesiod; nor is Varuṇa represented in the Veda, as Uranos is by the Greek poet, as the progenitor of Dyaus (Zeus), except in the general way in which he is said to have formed and to preserve heaven and earth.

VI. INDRA.⁴

Indra is, as Professor Roth remarks,⁵ the favourite national deity of the Aryan Indians. More hymns are dedicated to

¹ Oxford Essays for 1866, p. 41.

² Hesiod Theog. 126:—

Γαίᾳ δέ τοι πρῶτον μὲν ἐγένετο Ἴσον ἑαυτῇ
'(Ουρανὸν ἀστερόενθ', ἵνα μιν περὶ πάντα καλύπτοι,
'(ὅφρ' εἴη μακάρεσσι θεοῖς ἔδος ἀσφαλὲς αἰεί.

³ Ibid, v. 176:—

'Ἦλθε δὲ Νύκτ' ἐπέγων μέγας 'Ουρανός, ἀμφὶ δὲ Γαίῃ
'Ἰμείρων φιλότῃτος ἐπέσχετο καὶ ῥ' ἐτανύσθη
Πάντῃ.

⁴ In my account of Varuṇa there is little of importance that had not been previously said by Professor Roth; but in this description of Indra there is a larger collection of particulars than I have noticed to have been brought together elsewhere.

⁵ In his Lexicon, s.v. Indra

his honour than to the praise of any other divinity. Although, however, his greatness is celebrated in the most magnificent language, he is not regarded as an uncreated being. As I have already noticed, he is spoken of in various passages as being born, and as having a father and a mother (ii. 30, 2; iii. 48, 2 f.; iv. 18, 1 ff., and 10, 11; x. 73, 1, 10).

Thus in iv. 17, 4 it is said of him: "Thy father¹ was the parent of a most heroic son; the maker of Indra, he also produced the celestial and unconquerable thunderer,—was a most skilful workman." And again, vii. 20, 5: "A vigorous (god) begot him, a vigorous (son) for the battle: a heroic female (*nāri*) brought him forth, a heroic (son)," etc. Again, x. 120, 1: "That was the highest (being) in the world from which this fierce and impetuous (god) was born," etc. Again, vii. 98, 3: "When born, thou didst drink the soma-juice to (gain) strength: thy mother declared thy greatness."—x. 73, 1: "The Maruts here augmented Indra, when his opulent mother brought forth the hero."—x. 134, 1: "When thou, Indra, didst fill the two worlds like the dawn, a divine mother bore thee, a blessed mother bore thee, the great monarch of the great people" (? the gods). In x. 101, 12, as we have already seen, he is called the son of Nishtigri. This word, as I have also noticed, is treated by the commentator as a synonyme of Aditi; but though Indra is always regarded as an Āditya in the later mythology, and even appears to be addressed in that character, along with Varuṇa, in vii. 85, 4, he is not commonly described as such in other parts of the Rīg Veda.²

In another place (iii. 49, 1) he is said to have been produced by the gods as a destroyer of enemies.

In the Puruṣa Sūkta (R. V. x. 90, 13) Indra is said to have sprung, along with Agni, from the mouth of Puruṣa. In one of the latest hymns (x. 167, 1) he is declared to have conquered heaven by austerity (*tapas*).

In vi. 59, 2, Indra and Agni are said to be twin brothers,

¹ In ii. 26, 3, Brahmanaspati is said to be the father of the gods.

² In iv. 26, 1, he is identified with Manu and Sūrya, and in viii. 82, 1, 4, and x. 89, 2, with Sūrya. In ii. 30, 1, he receives the epithet of *Savitr*.

having the same father, and whose mothers are, the one here, the other there. (The sense of this is not very evident.) In x. 55, 1 his brother's sons are mentioned.

In i. 82, 5, 6, Indra's wife is alluded to; and in a few passages (i. 22, 12; ii. 32, 8; v. 46, 8; x. 86, 11, 12) mention is made of a goddess *Indrāṇī*, who, from her name, must be the spouse of Indra.

Even as an infant Indra is said to have manifested his warlike tendencies. "As soon as he was born, the slayer of *Vṛtra* (Indra) grasped his arrow, and asked his mother, 'Who are they that are renowned as fierce warriors?' " (viii. 45, 4, 5; 66, 1, 2). He says of himself (x. 28, 6): "My father begot me (a god) without an enemy."

A variety of vague and general epithets are lavished upon Indra. He is distinguished as youthful, ancient, strong, agile (*nṛtu*, i. 130, 7; ii. 22, 4; vi. 29, 3; viii. 24, 9, 12; viii. 57, 7; viii. 81, 3), martial, heroic, bright, undecaying, all-conquering, lord of unbounded wisdom, and irresistible power and prowess, wielder of the thunderbolt, etc. etc. (i. 4, 8; i. 16, 9; i. 30, 6, 15; i. 61, 1; i. 81, 2, 7; i. 84, 2; i. 100, 12; i. 102, 6; i. 112, 23; i. 165, 6; ii. 21, 1-3; iii. 30, 3; iii. 32, 7; iii. 45, 2; iii. 46, 1; vi. 18, 4; vii. 20, 4; vii. 22, 5; viii. 81, 8; viii. 84, 7 ff.; x. 103, 1 ff.). "He has vigour in his body, strength in his arms, a thunderbolt in his hand, and wisdom in his head"¹ (ii. 16, 2; viii. 85, 3). "He assumes the most beautiful forms, and is invested with the ruddy lustre of the sun" (x. 112, 3). The Vedic poets have also described to us a few of the features, as they conceived them, of his personal appearance. The epithet which is most frequently applied to him is *suṣipra*, or *ṣiprin*, in the interpretation of which *Sâyana* wavers between "the god with handsome cheeks or nose," and "the god with the beautiful helmet or turban" (i. 9, 3; i. 29, 2; i. 81, 4; i. 101, 10;² iii. 30, 3; iii. 32, 3; iii. 36, 10; viii. 17, 4; viii. 32, 4, 24; viii. 33, 7; viii. 55, 2, 4; viii. 81, 4; viii. 82, 12; x. 105, 5).³

¹ On this use of *ṣiras*, the head, as the seat of intelligence, compare iii. 51, 12.

² Compare i. 30, 11.

³ A note on this word will be given when I come to treat of the Maruts.

He is also called *hari-sipra*, the ruddy-cheeked (x. 96, 4, 9, 12); *hari-keśa*, the ruddy- or golden-haired (x. 96, 5, 8); *hari-nāga*, the ruddy- or golden-bearded, or moustached (x. 96, 8). His beard is violently agitated when he puts himself in motion (ii. 11, 17; x. 23, 1, 4).¹ His whole appearance is ruddy or golden (*hari-varpa*, x. 96, 1 ff.). He is sometimes also described as *hiranyaya*, golden (i. 7, 2; viii. 55, 3), and as having golden arms (vii. 34, 4); and sometimes as of an iron hue (i. 56, 3; x. 96, 4, 8). His arms are long and far-extended (viii. 32, 10; viii. 70, 1). But his forms are endless; he can assume any shape at will (iii. 38, 4; iii. 48, 4; iii. 53, 8; vi. 47, 18). Carrying in his hand a golden whip (viii. 33, 11), he is borne on a shining golden car, with a thousand supports (i. 30, 16; i. 56, 1; vi. 29, 2; viii. 1, 24, 25; viii. 58, 16), which moves more swiftly than thought (x. 112, 2), and is drawn by two² tawny (ruddy, or golden) steeds, snorting, neighing, and irresistible (i. 30, 16; i. 81, 3); with flowing golden manes (i. 10, 3; i. 82, 6; viii. 17, 2; viii. 32, 29), hair like peacock's feathers (iii. 45, 1), and peacock's tails (viii. 1, 25), which rapidly traverse vast distances (ii. 16, 3). His car appears to have been formed by the R̥bhus (i. 111, 1; v. 31, 4). The following are some of the other texts which refer to Indra's chariot and horses: i. 6, 2; i. 16, 2; i. 55, 7; i. 84, 6; i. 100, 16; i. 101, 10; ii. 11, 6; viii. 82, 24; x. 44, 2. He is also said to be borne by the horses of the Sun (x. 49, 7), or by those of Vāta, the wind (x. 22, 4-6). The same deity, Vāyu, the wind, is said to have Indra for his charioteer, or companion in his car (iv. 46, 2; iv. 48, 2; vii. 91, 6). The horses of Indra are declared to be yoked by the power of prayer (ii. 18, 3; iii. 35, 4; viii. 1, 24; viii. 17, 2), which is no doubt another mode of saying that it

¹ A beard is also assigned to Pūshan, who similarly shakes it (x. 23, 7).

² In ii. 18, 4-7 Indra is invited to come with two, four, six, eight, ten, twenty, thirty, forty, fifty, sixty, seventy, eighty, ninety, or a hundred horses (compare vii. 1, 2) to drink the Soma-juice. In iv. 46, 3, a thousand horses are said to convey Indra and Vāyu. In viii. 1, 24, Indra's horses are said to be a thousand and a hundred. From such a text as iii. 35, 7, where Indra is informed that food has been provided for his horses, as well as soma-juice to fill his own belly (v. 6), it would appear that the worshipper had a perfect assurance of the god's presence. In another place, however (x. 114, 9), the enquiry is made (among several others denoting difficulty and mystery), "Who has perceived the two horses of Indra?"

is in consequence of the importunity of his worshippers that he makes ready his chariot to come and receive their oblations, and fulfil their desires.

The thunderbolt of Indra is generally described as having been fashioned, or brought from heaven by Tvashtṛ, the artificer of the gods (i. 32, 2; i. 66, 6; i. 85, 9; i. 121, 9; v. 31, 4; vi. 17, 10; x. 48, 3); but in other places it is declared to have been made and given to Indra by Kāvya Uṣanas. Its natural mode of production is alluded to in viii. 89, 9, where it is said: "The thunderbolt lies in the (aerial) ocean, enveloped in water." This thunderbolt is sometimes styled golden (i. 57, 2; i. 85, 9; viii. 57, 3; x. 23, 3), sometimes ruddy (*harita*, x. 96, 3); but more commonly it is said to be of iron (i. 52, 8; i. 80, 12; i. 81, 4; viii. 85, 3; x. 48, 3; x. 96, 3; x. 113, 5); sometimes it is described as four-angled (iv. 22, 2), sometimes as hundred-angled (vi. 17, 10), sometimes as hundred-jointed (*śataparran*, i. 80, 6; viii. 6, 6; viii. 65, 2; viii. 78, 3), and sometimes as having a thousand points (i. 80, 12; i. 85, 9; v. 34, 2; vi. 17, 10). Indra is in one place (i. 55, 1) represented as sharpening his own thunderbolt. In other passages this god is spoken of as armed with a bow and arrows (viii. 3, 9; viii. 45, 4; viii. 66, 6; x. 103, 2, 3). His arrows are described as golden (viii. 66, 11), as having a hundred points, and as being winged with a thousand feathers (viii. 66, 7). Indra is also declared to carry a hook (*ankuṣa*). Thus in viii. 17, 10 it is said: "May the hook be long wherewith thou reachest wealth to the worshipper who offers oblations." And similarly in Atharva Veda vi. 82, 3: "With that great golden hook of thine which confers wealth, O lord of Śachî (Indra), reach a wife to me who am longing for one."¹ Another text in which this word occurs is R. V. x. 134, 6 (= Sâma Veda ii. 441): "Thou, O wise (Indra), carriest a long hook like a spear, and hast held fast therewith, as a goat (catches) a branch with its fore foot." The word is also

¹ In these passages I follow Roth's explanation of *ankuṣa*, as given in his Lexicon, s. v. In his translation of this passage from the A. V. in Indische Studien v. 241, Professor Weber understands the word (*ankuṣa*) of a goad with which cattle are driven.

found in x. 44, 9: "I carry to thee this well-made goad wherewith, O Maghavan, thou mayest rend the Śaphâruj demons."¹

Invoked by his mortal worshippers, Indra obeys the summons, and speedily arrives in his chariot to receive their offerings. He finds food provided for his horses (iii. 35, 7), and large libations of soma-juice are poured out for himself to quaff. The following are a few of the numerous passages which refer to this worship of Indra: i. 4, 8; i. 32, 3; i. 80, 1 ff.; i. 84, 1, 4; ii. 15, 1, 2; ii. 19, 1 ff.; ii. 21, 1 ff.; iii. 36, 3; iii. 40, 1 ff.; iv. 16, 1 ff.; vi. 23, 1, 5, 6; vi. 27, 1 ff.; vi. 29, 4; vii. 22, 1 ff.; vii. 29, 1 ff.; viii. 3, 1; x. 104, 1 ff.; etc. etc. The gods are all described as hastening eagerly to partake of this beverage (viii. 2, 18); but Indra is particularly addicted to the indulgence (i. 104, 9; i. 175, 5; ii. 14, 1; vii. 33, 2; viii. 2, 4). Indeed, it would appear to be to him an absolute necessary of life, as his mother gave it to him to drink on the very day of his birth (iii. 32, 9, 10; iii. 48, 2, 3; vii. 98, 3). He is said to have drunk at one draught thirty lakes (or cups?) of soma (viii. 66, 4; compare vi. 17, 11, and viii. 7, 10). His worshippers invite him in the most naive manner to drink freely (vi. 47, 6) and fill his belly by copious potations, and he speaks in similar language of having accepted the invitation (i. 8, 7; i. 104, 9; ii. 11, 11; ii. 14, 10; ii. 16, 2; iii. 36, 6-8; iii. 40, 5; iii. 47, 1; iii. 51, 12; viii. 1, 23; viii. 2, 1; viii. 17, 5-8; viii. 67, 7; viii. 81, 22-24; x. 28, 2; x. 104, 2).²

The hymns and prayers addressed to Indra are described as stimulating his energies and increasing his vigour (i. 52, 7; i. 54, 8; i. 81, 1; ii. 12, 14; iii. 32, 12, 13; iii. 34, 1; vi. 36, 2; viii. 6, 35; viii. 14, 5, 11); and the worshippers (as well as the gods) are said to place the thunderbolt in his hands and to assist its efficacy (i. 63, 2; ii. 11, 4; ii. 20, 8;

¹ I am indebted to Professor Aufrecht for pointing out the sense of this verse. *Śaphâruj* seems to mean a demon or an animal that destroys with its hoofs. The word occurs also in x. 87, 12, where it is an epithet of *Yatnadhara*, a demon, and must refer to some goblin who was conceived to tear with its hoofs.

² The soma-juice was also drunk by the worshippers themselves, and its effects on some of them are occasionally described. Thus in vi. 47, 3, it is said "This (soma), when drunk, impels my voice, it stimulates the ardent thought." And

iii. 32, 12). The other deities, too, are described as infusing divine strength into Indra¹ (i. 80, 15; vi. 20, 2; x. 48, 3; compare x. 120, 3, and x. 56, 4), and as placing him in the van (i. 55, 3; i. 131, 1; vi. 17, 18; viii. 12, 22, 25). He is impelled and fortified by the Maruts (iii. 32, 4; iii. 35, 9; iii. 47, 3, 4; vi. 17, 11; viii. 7, 24; x. 73, 1, 2; x. 113, 3).²

in viii. 48, 3, its elevating effect is still more distinctly told, in words which may be rendered as follows :

We've quaffed the soma bright,
And are immortal grown;
We've entered into light,
And all the gods have known.
What mortal now can harm,
Or foeman vex us more?
Through thee beyond alarm,
Immortal god, we soar.

Compare the curious parallel to this (already noticed in Sanskrit Texts, iii. 162) in the satirical drama of Euripides, the Cyclops, 578 ff., where Polyphemus exclaims in his drunken exultation :

'Ο δ' οὐρανός μοι συμμεμιγμένος δοκεῖ
Τῇ γῇ φέρεσθαι, τοῦ Διὸς τε τὸν θρόνον
Λεύσσω τὸ πᾶν τε δαιμόνων ἄγνυν σέβας.

¹ Indra on his side again is said to give divine power to the other gods (vi. 36, 1).

² In one place, however, (viii. 7, 31) the Maruts are asked what they were seeking when they deserted Indra, and who could then trust in their friendship. In another text (viii. 85, 7), on the contrary, it is said that all the other gods who had been Indra's allies, terrified by the blast of Vṛtra's breath, deserted Indra and fled (compare iv. 18, 11), while the Maruts, it must be supposed, stood firm, as Indra is advised to make friends with them, and then he should conquer all hostile armies. The commentator, however (like many other dogmatical theologians), finding it necessary to reconcile these conflicting statements, interprets viii. 7, 31 differently, and makes it mean, "When did you desert Indra? i.e. never," and quotes the Aitareya Brâhmaṇa iii. 20, which says the Maruts did not desert Indra; but said, "Smite, O lord, slay, play the hero."

In R. V. i. 32, 14, Indra himself is said to have become frightened after he had slain Vṛtra, and to have crossed ninety-nine rivers in his flight. Compare Müller's Anc. Sansk. Lit. p. 547.

The Aṣvins and Sarasvatî are also said to have assisted Indra (R. V. x. 131, 4, 5 = Vâj. Sanh. x. 33, 34). "You two, Aṣvins, lords of splendour, drinking together the delightful draught (of soma), protected Indra in his achievements against the Asura Namuchi. 5. As parents a son, so ye two, Aṣvins, by your wisdom and your energy, delivered thee, O Indra. When thou, O magnificent (Indra), didst drink the delightful draught (of soma), Sarasvatî waited upon thee with her powers." A story is told by the commentator on the Vâj. Sanh. x. 33, to explain these lines. Namuchi, it seems, was a friend of Indra; and taking advantage of his friend's confidence, he drank up Indra's strength along with a draught of wine and soma. Indra then told the Aṣvins and Sarasvatî that Namuchi had drunk up his strength. The Aṣvins and Sarasvatî in consequence gave Indra a thunderbolt in the form of foam, with which he smote off the head of Namuchi. The Aṣvins then drank the soma, mixed with blood and wine, from the belly of Namuchi, and transferred it pure to Indra; and by transferring it they delivered Indra. The story is taken from the Śatapatha Brâhmaṇa xii. 7, 3, 1 ff. (p. 934 Weber's ed.) and is the original version of those adduced by me elsewhere (Sansk. Texts iv. 222 and 420). As given in the Brâhmaṇa, it runs thus: "The Asura Namuchi carried off Indra's strength (*indriya*), the essence of food, and the draught of soma, together with wine. He (Indra)

Thus exhilarated and encouraged (ii. 11, 11; ii. 15, 1 ff.; ii. 19, 2; vi. 47, 1, 2; x. 112, 1), Indra hurries off, escorted by troops of Maruts, and sometimes attended by his faithful comrade Vishnu (i. 22, 19; i. 85, 7;¹ iv. 18, 11; vii. 99, 4, 5; viii. 89, 12²), to encounter the hostile powers in the atmosphere who malevolently shut up the watery treasures in the clouds. These demons of drought, called by a variety of names, as Vṛtra, Ahi, Śushṇa, Namuchi, Pipru, Arbuda, Uraṇa, etc. etc. (i. 121, 9, 10; ii. 14, 4 ff.; viii. 32, 2, 3), armed, on their side also, with every variety of celestial artillery (i. 32, 13), attempt, but in vain, to resist the onset of the gods.³ Heaven and Earth quake with affright at the crash of Indra's thunder (i. 80, 11, 14; i. 100, 13; ii. 11, 9,

hastened to the Aśvins and Sarasvatī, and said 'I have sworn to Namuchi, I will neither slay thee by day, nor by night, neither with club, nor with bow, neither with the palm of my hand (*prihana*), nor with fist, neither with dry nor with moist, and he has carried off that of mine, will ye recover it for me?' They answered 'Let us have a share in it, and we will recover it.' Indra replied 'It shall be common to us all; recover it therefore.' Then the Aśvins and Sarasvatī anointed the thunderbolt with the foam of the waters, saying, 'It is neither dry nor moist.' With that Indra struck off the head of Namuchi, when night was passing into dawn, and the sun had not yet risen, when (as he said) 'it was neither day nor night.' . . . When his head had been cut off, the soma remained mixed with blood, and they loathed it. But having perceived this draught of the two somas, according to the text, 'King Soma when poured out, is nectar,' they with this made the other mixed fluid palatable, and swallowed it."

In one place (x. 138, 6) Indra is said to perform his exploits alone. Compare i. 84, 7.

¹ Benfey, however, refers this passage, i. 85, 7, not to Indra, but to the soma.

² Compare i. 156, 5, vi. 17, 11; viii. 12, 27, viii. 66, 10 x. 113, 2, in which passages (as well as in separate hymns, i. 155; vi. 89), Indra and Vishnu are respected. The Satapatha Brāhmaṇa has the following story about Indra and Vishnu v. 5, 5, 1 ff.

"Formerly Vṛtra had within him all the Rik, Yajush, and Sāma verses. Indra was anxious to discharge a thunderbolt at him, (2) and said to Vishnu: 'I shall shoot a thunderbolt at Vṛtra, follow after me.' 'So be it,' said Vishnu, 'I will follow thee, smite him.' Indra then aimed a thunderbolt at Vṛtra, who was alarmed at it, and said, (3) 'I have this (source of) strength, shall I give it up to thee? but do not smite at me.' So he gave him the Yajush verses. Indra then aimed a second thunderbolt at him, (4) when he said, 'I have this (source of) strength, shall I give it up to thee? but do not smite at me.' So he gave the Rik verses. Indra then aimed a third thunderbolt at him, (5) when he said, 'I have this (source of) strength, shall I give it up to thee? but do not smite at me.' So he gave him the Sāma verses. . . . (7) Indra lifted up the thunderbolt, Vishnu followed him."

Agni is in several places (i. 109, 5, 7, 8, iii. 12, 4, 6, x. 66, 2) associated with Indra as a thunderer, a destroyer of Vṛtra, and an overthrower of cities. Varuna, too, is in one place (iv. 41, 4) joined with Indra as a thunderer.

³ Vṛtra² is said, in ii. 30, 3, to have rushed upon Indra, clothed in a cloud, but to have been overcome.

10; vi. 17, 9), and even Tvashtṛ himself, who forged the bolts, trembles at the manifestation of his anger (i. 80, 14). The enemies of Indra are speedily pierced and shattered by the discharge of his iron shafts, and even by their very sound (vi. 27, 4; viii. 6, 13). The waters, released from their imprisonment, descend in torrents to the earth, fill all the rivers, and roll along to the ocean (i. 34, 4, 12; i. 55, 6; i. 57, 6; i. 61, 10; i. 103, 2; ii. 11, 2; ii. 12, 12; ii. 14, 2; ii. 15, 3; ii. 19, 3; iii. 32, 6; iv. 17, 1; v. 32, 1; vi. 30, 4; viii. 65, 3; x. 133, 2). The gloom which had overspread the sky is dispersed, and the sun is restored to his position in the heavens (i. 32, 4; i. 51, 4; i. 52, 8; ii. 19, 3; x. 89, 2). Constant allusions to these elemental conflicts occur in nearly every part of the Rig Veda (i. 4, 8; i. 32, 1 ff.; i. 52, 1 ff.; i. 54, 4 ff.; i. 80, 1 ff.; i. 103, 1 ff.; ii. 11, 5 ff.; v. 32, 1 ff.; x. 87, 9; x. 113, 6), and the descriptions are sometimes embellished with a certain variety of imagery. The clouds are represented as mountains, or are variously characterized as the ancient or eternal (ii. 14, 6; viii. 17, 13; viii. 87, 6), the autumnal (i. 131, 4; vi. 20, 10), the moving (viii. 1, 28), and the iron- (ii. 20, 8) or stone-built (iv. 30, 20) cities of the Asuras (or atmospheric demons), which Indra overthrows (i. 51, 5; i. 63, 7; i. 103, 2; i. 130, 7; i. 174, 8; ii. 19, 6; ii. 20, 7; iii. 12, 6; iv. 26, 3; iv. 30, 13; vi. 61, 4; viii. 82, 2; x. 89, 7). He casts down his enemies when he discovers them on the aerial mountains (i. 32, 2; i. 130, 7; ii. 12, 11; iv. 30, 14; vi. 26, 5); or hurls them back when they attempt to scale the heavens (ii. 12, 12; viii. 14, 14). One of them he crushes under his foot (i. 51, 6), or pierces with ice (viii. 32, 26). He strikes off the head of Namuchi with the foam of the waters¹ (viii. 14, 13). One of his opponents is described as a monster with ninety-nine arms (ii. 14, 4), and another as having three heads and six eyes (x. 99, 6).

The growth of much of the imagery thus described is perfectly natural, and easily intelligible, particularly to persons who have lived in India, and witnessed the phenomena of the seasons in that country. At the close of the long hot weather,

¹ See above, in a preceding note.

when every one is longing for rain to moisten the earth and cool the atmosphere, it is often extremely tantalizing to see the clouds collecting and floating across the sky day after day, without discharging their contents. And in the early ages when the Vedic hymns were composed it was an idea quite in consonance with the other general conceptions which their authors entertained, to imagine that some malignant influence was at work in the atmosphere to prevent the fall of the showers of which their parched fields stood so much in need. It was but a step further to personify both this hostile power and the beneficent agency by which it was at length overcome. Indra is thus at once a terrible warrior and a gracious friend, a god whose shafts deal destruction to his enemies, while they bring deliverance and prosperity to his worshippers. The phenomena of thunder and lightning almost inevitably suggest the idea of a conflict between opposing forces: even we ourselves, in our more prosaic age, often speak of the war or strife of the elements. The other appearances of the sky, too, would afford abundant materials for poetical imagery. The worshipper would at one time transform the fantastic shapes of the clouds into the chariots and horses of his god, and at another time would seem to perceive in their piled-up masses the cities and castles which he was advancing to overthrow.

In numerous places of the Rig Veda, the highest divine functions and attributes are ascribed to Indra. A collection of the most striking of these passages will be found in my *Sanskrit Texts*, vol. iv. pp. 85-94.

I subjoin some additional passages:

i. 61, 14. "Through fear of him when he is born, the stable mountains, and heaven and earth, are agitated."

i. 100, 1. "The monarch of the great heaven and of the earth . . . 15. of whose godhead neither gods nor men have attained the limit, nor have the waters reached the end of his power," etc.

i. 101, 5. "He (Indra) who is the lord of the whole moving and breathing (world)," etc.

i. 165, 9. "There is nothing unconquered by thee: no

god like thee is known. No one to be born, or yet born, can rival thee. Do, great god, whatever thou wilt to do."

i. 173, 6. "Since Indra is so superior to men, heaven and earth do not suffice for his girdle," etc.

ii. 17, 5. "He has settled the ancient mountains by his might. He has supported the earth, the universal nurse. By his skill he has propped up the sky from falling."

iii. 30, 5. "When thou, O Maghavan, didst grasp even these two boundless worlds, they were but a handful to thee."¹

iii. 46, 2. "Thou, who alone art the king of the whole world, etc. . . . 3. Indra, in every respect unequalled, has surpassed all measures, has surpassed the gods: the impetuous deity has surpassed in greatness the heaven and the earth, and the broad and vast atmosphere."

iv. 17, 2. "At the birth of thee, the glorious one, the heaven trembled, and the earth, through fear of thy wrath," etc. (Compare iv. 22, 3, 4.)

v. 30, 5. "When thou wert born, the highest and supreme, bearing a name renowned afar, the gods were then afraid of Indra," etc.

v. 42, 6. "Let us declare the deeds of the unrivalled, victorious, undecaying god, who is attended by the Maruts. Neither have former nor later (men), nor has any recent (man) comprehended thy valour."

vi. 30, 1. "Indra has surpassed the heaven and the earth. The two worlds are but equal to the half of him."

viii. 6, 15. "Neither heavens, nor atmospheres, nor earths, have equalled Indra the thunderer in might."

viii. 12, 30. "When thou (Indra) didst sustain the sun, a brilliant light, in the sky, then all worlds yielded to thee."

viii. 14, 9. "By Indra the lights of the sky have been fixed and established. Those which are established he has not removed."

viii. 15, 2. "Whose great vigour supported the two worlds, the mountains, plains," etc.

viii. 85, 4. "I regard thee, Indra, as the most adorable of

¹ Compare Isaiah xl. 12.

the adorable, the caster down of the unshaken,¹ the most distinguished of living things, the chief of beings . . . 6. Let us praise this Indra who produced these (worlds): all beings are inferior (or subsequent) to him."

viii. 86, 14. "All worlds, thunderer, both heaven and earth, tremble through fear of thee."

x. 44, 8. "He sustained the quaking mountains and plains: the sky resounded; he shook the atmosphere," etc. (Compare ii. 12, 2).

x. 54, 1. "(I celebrate,) Maghavan, thy glory in that through thy greatness the terrified worlds invoked thee. Thou didst deliver the gods, etc. . . . 2. When thou didst march on increasing in bulk, proclaiming thy strength amongst men, thy combats which they describe were (the proofs of) thy power; neither now nor before dost thou know of any enemy. 3. Which of all the seers before us have found out the end of all thy greatness? seeing that thou didst produce at once the father and the mother (heaven and earth)² from thine own body."

x. 89, 10. "Indra rules over the sky, Indra rules over the earth, Indra rules over the waters, and Indra rules over the mountains," etc.

In some places (iv. 19, 2; iv. 21, 10) he is called *samrāt*, or universal monarch, in other places (iii. 46, 1; iii. 49, 2; viii. 12, 14) *svardāt*, a self-dependent sovereign.

The preceding passages afford a fair specimen of the language in which Indra is most commonly celebrated in the hymns. It will be observed that the attributes which are ascribed to him are chiefly those of physical superiority, and of dominion over the external world. In fact, he is not generally represented as possessing the spiritual elevation and moral grandeur with which Varuna is so often invested. There are, however, many passages in which Indra's close relations with his worshippers are described, and a few in which an ethical character is attributed to him. Faith in him is confessed, or enjoined (i. 55, 5; i. 103, 5; i. 104, 6, 7; ii. 12, 5; and the reality of his existence and power is

¹ The Maruts are said to have the same power (i. 64, 3). ² See above, p. 57.

asserted in opposition to sceptical or faithless doubts (ii. 12, 5 ; ii. 18, 3, 4 ; viii. 89, 3 ff.). He is the friend, and even the brother, of his present worshippers, as he was the friend of their forefathers (ii. 18, 8 ; ii. 20, 3 ; iii. 53, 5 ; iv. 23, 6 ; vi. 18, 5 ; vi. 21, 5, 8 ; vi. 45, 1, 7 ; x. 22, 1, 2 ; x. 23, 7 ; x. 42, 2, 4, 11) ; but he desires no friendship with the man who offers no oblations (x. 42, 4). He is reminded that he has friends, while his adorers are friendless (viii. 21, 4). His friend is never slain or conquered¹ (x. 152, 1). It is he almost exclusively² who is invoked as the patron of the Âryyas, and their protector against their enemies, aerial or earthly³ (i. 51, 8, 9 ; i. 103, 3 ; i. 130, 8 ; ii. 11, 18 ; iii. 34, 9 ; iv. 26, 2 ; vi. 18, 3 ; vi. 25, 2 ; viii. 24, 27 ; viii. 87, 6 ; x. 49, 3 ; x. 86, 19 [?]). He is invoked by men like a father (x. 48, 1). He is embraced by the hymns of his votaries as a husband is embraced by his wives (x. 43, 1). His right hand is grasped by suppliants for riches (x. 47, 1). His powerful arms are resorted to for protection (vi. 47, 8). He is a preserver and deliverer easy to be entreated (vi. 47, 11). He is implored not to slay for one, two, three, or even for many, sins⁴ (viii. 45, 34). He richly rewards his faithful servants (ii. 11, 16 ; ii. 12, 6, 14, 15 ; ii. 19, 4 ; ii. 22, 3 ; v. 37, 1, 4, 5 ; x. 160, 3, 4), though he is sometimes naïvely importuned to be more prompt in his generosity (iv. 21, 9 ; x. 42, 3), and is even told that his worshipper, if in his place, and possessed of his means, would be more liberal, and not leave his friends in destitution (vii. 32, 18, 19 ; viii. 14, 1, 2 ; and see Müller's *Anc. Sansk. Lit.*, p. 545). He is supplicated

¹ The same is said of Mitra (iii. 59, 2) ; and of the Maruts (v. 54, 7).

² The Aṣvins are, however, said, in i. 117, 21, to have created a great light for the Âryya. In vi. 21, 11, all the gods are said to have made Manu superior to the Dâsa ; Vishṇu is elsewhere said to have traversed the earth to give it for a domain to Manu (vii. 100, 4) ; and Agni is called the promoter of the Ârya (*âryasya vardhanam*, viii. 92, 1).

³ Indra is, however, also invoked for aid against enemies of the Aryan race, as well as against aliens (vi. 60, 6 ; x. 38, 3 ; x. 102, 3). Indra and Varuṇa are invoked together for the same purposes (vii. 83, 1). Manu is supplicated for the same objects (x. 83, 1). The gods (apparently those specified in the preceding verses) are said (x. 65, 11) to spread Aryan rites upon earth.

⁴ In reply to this, Indra is made to ask (v. 37) "What friend, O mortals, ever kills his friend without provocation?" See *Nirukta* iv. 2 ; and *Roth's Illustrations*, p. 38.

for all sorts of temporal blessings, and among the rest for victory in war (ii. 12, 8, 9; and especially x. 103, 7 ff.). As a man in walking puts first one foot forward and then the other, so Indra by his power changes the relative positions of men; he subdues the fierce and advances others: lord of both worlds, he is the enemy of the prosperous and ungodly man (vi. 47, 15, 16); he punishes sinners and those who offer no sacrifice (i. 131, 4; ii. 12, 10; v. 42, 9; viii. 59, 10, 11),¹ while he protects his own servants, and leads them into a "large room," into celestial light and security (vi. 47, 8).

Professor Roth is of opinion that Varuṇa belongs to an older dynasty of gods than Indra, and that during the Vedic age the high consideration originally attaching to the former was in course of being transferred to the latter. In support of his position that Varuṇa's worship was then declining, he urges the circumstance that in the tenth book of the Rig Veda, which contains the latest productions of that period, there is not a single entire hymn addressed to that deity.²

This supersession of the one god by the other, Roth considers to be a result, or feature, of the gradual modification which the old Arian religion soon began to undergo after it had been transplanted into India. The more supersensuous or spiritual elements of this religion he thinks were preserved, though in a peculiar and somewhat altered form, in the Persian creed, which at the same time rejected almost entirely the gods representing the powers of nature, whom it had also inherited from an earlier age. The Indian faith, as found in the Rig-veda, has, on the contrary, according to Roth, begun already to give the preference to these latter

¹ Compare It V viii 21, 14 (S. V. n. 740), which is thus rendered by Professor Müller (*Anc Sansk Lit.*, p. 543 f.) "Thou never findest a rich man to be thy friend, wine-swillers despise thee. But when thou thunderest, when thou gatherest (the clouds), then thou art called like a father." Benfey renders the verse somewhat differently, thus "Thou never takest for a friend the man who is merely rich, he who is inflated with wine is a burthen to thee with a mere sound thou amusest them, and then thou art supplicated like a father."

² See the *Journal of the German Oriental Society*, vi. 73, and Böhtlingk and Roth's *Sanskrit and German Lexicon*, s. v. Indra. Professor Whitney adopts the same view (*Journal Amer Orient Society*, iii 327). Windischmann, in his *Mithra*, p. 54, extends the same remark to that god also. The passage is translated in *Sanskrit Texts*, n. 295.

deities, to transfer to them an ever increasing dignity and honour, to draw down the divine life into nature, and to bring it ever closer to men. He finds proof of this in the development of the myth regarding Indra, a god who, in the earlier period of Arian religious history, either had no existence, or was confined to an obscure province. The Zend Avesta ascribes the function which forms the essence of the later myth concerning Indra to another god. This god Trita, however, disappears in the Indian mythology of the Vedic age, and is succeeded by Indra. And not only so, but towards the end of this period Indra begins to set aside even Varuna himself, the highest god of the ancient creed, from the position which is proved, partly by historical testimonies, and partly by the very conception of his character, to belong to him, and becomes, if not the supreme god, at least the national god, whom his encomiasts seek to elevate above the ancient Varuna. Thus, according to Roth, an old god, common to the Arians (*i.e.* the Persians and Indians), and perhaps also to the entire Indo-Germanic race, Varuna-Ormuzd-Uranos, is thrown into the background, and in his room Indra, a peculiarly Indian and national god, is introduced. (See the *Journal of the German Oriental Society*, vi. 76 f.)

I am not aware that Roth has anywhere stated in detail any other proofs of the anteriority of Varuna to Indra.

The superior antiquity of the former may, however (as intimated in the passage just quoted from that writer), be argued from the fact, already noticed, of the coincidence of his name with that of the Greek *Οὐρανός*, which goes some way to prove that a deity of this name was worshipped by the entire Indo-Germanic race before its western branches were separated from the eastern, whilst we shall look in vain for any traces of the name Indra in the Greek mythology.

If, further, Roth's opinion¹ that there is not merely an analogy, but an actual historical connection between the Adityas and the Amshaspands of the Zend Avesta, be well founded, it will be made out that Varuna, who is one of the Adityas, must have been worshipped by the Aryans before

¹ *Journ. Germ. Orient. Society*, vi. 89, 90.

the separation of the Persian from the Indian branch of that family. And this conclusion will be strengthened if we adopt the suggestion of Professor Whitney,¹ that Ahura-Mazda is a development of Varuna.

I learn, however, from a communication with which I have lately been favoured by Professor Spiegel, of Erlangen, that that eminent Zend scholar is unable to recognize any similarity between Ahura-Mazda and Varuna, and considers the connection of the Amshaspands with the Âdityas to be very doubtful. And such of the grounds for regarding Varuna as an older deity than Indra as might otherwise have been derived from the Zend Avesta would be a good deal weakened if with the same scholar (Avesta, i. 10) we should look upon the Indra or Andra of the Zend books as standing for Indra, and as representing a deity who had at one time been an object of worship common both to the Indian and Persian Aryans, but who after the separation of the two tribes was degraded by the latter into an evil spirit. For while Indra would thus be proved to have been known before the period of that separation, he might also have been at one time a god held by both divisions of the Âryas in as much consideration as Varuna. I learn, however, from Professor Spiegel, that the materials afforded by the Zend books in reference to this name are not sufficient to afford a basis for any far-reaching conclusions.²

¹ Journal of the American Oriental Society, iii. 327. There is no doubt that the term *Asura*, "spirit," which is frequently applied to Varuna and to Mitra, and also to Indra and others of the Vedic gods, is the same word which, in its Zend form *Ahura*, makes up, with the addition of *Mazda*, the appellation of the supreme and benevolent deity of the Iranian mythology. Professor Muller regards the name *Ahura Mazda* as corresponding to the Sanskrit *Asuro-medhas*, the "wise spirit" (Lectures on the Science of Language, 1st edition, p. 195). In regard to Ahura-Mazda and the Amshaspands, Professor Spiegel has, as he informs me, collected all the positive information he could obtain in the Avesta, in the Introduction to the 3rd vol. of his translation, pp. iii ff.

² The identification of Andra with Indra was, as Professor Spiegel tells me, first proposed by Burnouf (*Yasna* 526 ff.), where a translation is given of the passage in which Andra is mentioned. It is rendered thus by Spiegel himself, in his Avesta, i. 176: "I fight with Indra, I fight with Sauru, I fight with the Dâcva Naoghaithu, to drive them away from the dwelling, the village, the castle, the country." The name Indra or Andra, as Professor Spiegel further informs me, occurs only in one other passage (Westergaard, *Zendavesta*, p. 475) which he (Prof S.) believes to be interpolated. It contains merely the name, and consequently throws no further light on the position of the god in the Avesta. The

the two, Varuṇa, is called *saṃrāt*, monarch (as he is in various places, see above, p. 79), and the other, Indra, is called *svarāt*, independent ruler (iii. 46, 1, and elsewhere; see above), and their separate functions are described in other parts of this and the following hymns (vii. 82, 2, 5, 6; vii. 83, 9; vii. 84, 2; vii. 85, 3), as their joint action is in other verses. Thus they are said to have dug the channels of the rivers, to have impelled the sun in the sky (vii. 82, 3), and to have made all creatures (ibid. 5). All the other gods are said to have infused strength and vigour into these two in the highest heaven (ibid. 2). These passages are consistent with the supposition that the two gods were felt to have been rivals, and that the author of the hymn sought to reconcile their conflicting claims.

But Viṣṇu and Indra are also joined together in the same way in some hymns, i. 155; vi. 69; vii. 99, 4 ff.; as are also Agni and Indra in others, i. 21; i. 108; i. 109; iii. 12; v. 86; vi. 59.

A number of verses occur in different parts of the Rig Veda (viz. i. 133, 1; iv. 23, 7; v. 2, 3; vii. 18, 16; x. 27, 6; x. 48, 7) in which the epithet *anindra*, "one who is no worshipper of Indra," is employed; but it is not clear to whom it is applied, whether (1) to persons who were not worshippers of Indra in particular, as distinguished from other Aryan gods, or (2) to the aboriginal tribes who did not worship either him or any other Aryan god, or perhaps (3) to evil spirits as the enemies of Indra. In other places (as I have above noticed) we find sceptical doubts expressed regarding Indra, as in ii. 12, 5: "Have faith in him, that terrible one, regarding whom men ask, 'Where is he?' and declare of him that 'He is not;'. . . . he, O men, is Indra;" and viii. 89, 3, 4: "Present to Indra a hymn soliciting food, a true hymn, if he truly exists. 'Indra does not exist,' says some one; 'who has seen him? whom shall we praise?' 'I am here, O worshipper,' [exclaims Indra]; 'behold me here; I surpass all creatures in greatness.'"

I have not noticed any passage in which any sceptical doubts are expressed regarding Varuṇa.

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... which is a fellow. Theophilus
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... p. 91, note 7 that
... of gods anterior to
... is said that all the gods
... In c. 12 the worship-
... and not false; and
... upon him who pours out
... who does offer them is

... is having no superior or
... in battle, and as having
... of the gods. And in the

... of which ends with the words,
... is too obscure to admit of
... or not.
... 101, 4.

following passages (formerly quoted in Sanskrit Texts, vol. iv. pp. 85 ff.), it is said that all of the gods are unable to frustrate the mighty deeds and counsels of Indra (ii. 30, 4); that no one, whether god or man, either surpasses or equals him (vi. 30, 4); that no one, celestial or terrestrial, has been born, or shall be born, like to him (vii. 32, 23); and that by battle he has acquired ample space (or wealth) for the gods (vii. 98, 3). And it is even said (i. 101, 3) that Varuṇa and Sūrya are subject to the command of Indra; and in x. 89, 8, 9, that the latter can destroy the enemies of Mitra, Aryaman, and Varuṇa (hereby evincing, of course, his superiority to those three gods).

All these texts, however, which are so laudatory of Indra, may be paralleled in the Rīg-veda, not only by similar ones referring to Mitra and Varuṇa (as we have seen above), but also by a farther set of texts, in which other gods are magnified in the same style of panegyric. This is in accordance with the practice of the Indian poets to exaggerate¹ (in a manner which renders them often mutually inconsistent) the attributes of the particular deity who happens at the moment to be the object of celebration. Thus in ii. 38, 9, it is said that neither Indra, Varuṇa, Mitra, Aryaman, nor Rudra can resist the ordinance of Savitr; in iv. 13, 2, that Varuṇa and Mitra conform to his will; and in vii. 38, 4, that the divine Aditi, and the kings Varuṇa, Mitra, and Aryaman unite to magnify the same deity. Again, in i. 156, 4, it is declared that king Varuṇa and the Aśvins submit to the power of Viṣṇu. In i. 141, 9, Varuṇa, Mitra, and Aryaman are said to be eclipsed (?) by Agni when he blazes forth. In iv. 5, 4, the same god is besought to consume those enemies who menace the stable abodes² of Varuṇa and the wise Mitra. In i. 128, 7, Agni is said to deliver men from the evil (*dhūrtleḥ*) inflicted by the mighty god Varuṇa. In iv. 1, 2, 3, Agni is solicited to bring Varuṇa, his brother and friend; and in vv. 4 and 5, of the same hymn, to remove Varuṇa and to avert his anger.

If, therefore, we were to infer from passages like i. 101, 8

¹ See Müller's *Anc. Ind. Lit.*, pp. 532 ff. ² Ordinances.—Roth, *s.v.* *dhāman*.

(which declares Varuna and the Sun to be subject to Indra), that the worship of Indra was beginning to gain ground on that of Varuna, we should have, in like manner, to conclude from the other texts just cited, that the worship of Savitr was beginning to supersede not only that of Varuna, Mitra, Aryaman, and Aditi, their mother, but also that of Rudra, and even of Indra himself.

VII. VÂYU.

Vâyu, the wind, as we have already seen, is often associated with Indra. (See also i. 2, 4; i. 14, 3; i. 23, 2; i. 135, 4 ff.; i. 139, 1; ii. 41, 3; iv. 46, 2 ff.; iv. 47, 2 ff.; v. 51, 4, 6 f.; vii. 90, 5 ff.; vii. 91, 4 ff.; x. 65, 9; x. 141, 4). The two gods appear to have been regarded by the ancient expositors of the Veda as closely connected with each other; for the Nairuktas, as quoted by Yâska (Nirukta, vii. 5), while they fix upon Agni and Sûrya as the representatives of the terrestrial and celestial gods respectively, speak of Vâyu and Indra in conjunction, as deities either of whom may represent those of the intermediate sphere.

Vâyu does not occupy a very prominent place in the Rîg-veda. If we except the allegorical description in the Purusha Sûkta, x. 90, 13, where he is said to have sprung from the breath of Purusha; or unless we understand vii. 90, 3, to assert that he was produced by heaven and earth, there is no passage where the parentage of Vâyu is declared. He is, however, said to be the son-in-law of Tvashṭr (viii. 26, 21 f.), though his wife's name is not given. But few epithets are applied to him. He is called *darṣata*, "beautiful," or "conspicuous" (i. 2, 1), and *supsarastama*, "most handsome in form" (viii. 26, 24). He is described as *krandad-ishṭi*, "rushing noisily onwards" (x. 100, 2). Together with Indra, he is designated as touching the sky, swift as thought, wise, thousand-eyed (i. 23, 2, 3). He moves in a shining car (iv. 48, 1; i. 134, 1; i. 135, 4; iv. 47, 1), drawn by a pair of red or purple horses (i. 134, 3). His team, however, is often said to consist of ninety-nine, of a hundred, or even of a thousand horses, swift as thought (i. 135, 1, 3; ii. 41, 1; iv. 48, 4, 5;

vii. 91, 6; vii. 92, 1, 5). As before mentioned, Indra and Vāyu frequently occupy the same chariot (iv. 46, 2; iv. 48, 2; vii. 81, 5), which has its framework of gold, which touches the sky, and is drawn by a thousand horses (iv. 46, 3, 4). Vāyu, like the other gods, is a drinker of soma. In fact, he alone, or in conjunction with Indra, seems to be entitled to the first draught of this libation (i. 134, 1; i. 135, 1, 4; iv. 46, 1; v. 43, 3; vii. 92, 2; viii. 26, 25). It is remarkable that Vāyu is but rarely connected with the Maruts or deities of the storm; but in one place (i. 134, 4) he is said to have begotten them; and in another place (i. 142, 12) to be attended by Pūshan, the Maruts and the Viṣve devās.

The following hymns are addressed to Vāta (another name of the god of the wind). The imagery in the first is highly poetical:

x. 168. "1. (I celebrate) the glory of Vāta's chariot; its noise comes rending and resounding. Touching the sky, he moves onward, making all things ruddy: and he comes propelling the dust of the earth. 8. The gusts of the air rush after him, and congregate in him as women in an assembly. Sitting along with him on the same car, the god, who is king of this universe, is borne along. 3. Hasting forward, by paths in the atmosphere, he never rests on any day. Friend of the waters, first-born, holy, in what place was he born? whence has he sprung? 4. Soul of the gods, source of the universe, this deity moves as he lists.¹ His sounds have been heard, but his form is not (seen): this Vāta let us worship with an oblation."

x. 186. "1. Let Vāta, the wind, waft to us healing,² salutary, and auspicious, to our heart: may he prolong our lives. 2. And, Vāta, thou art our father, our brother, and our friend: cause us to live. 3. From the treasure of immortality, which is deposited yonder in thy house, O Vāta, give us to live."

Here the same property is ascribed to Vāta which is elsewhere ascribed to Rudra, that of bringing healing.

¹ Compare St. John's Gospel, iii. 8 "The wind bloweth where it listeth," etc.
² Compare i. 89, 4.

VIII. THE MARUTS.

The Maruts, or Rudras, the gods of the tempest, who form a large troop (viii. 85, 8), are the sons of Rudra and Pṛṣni¹ (i. 64, 2; i. 85, 1; i. 114, 6; ii. 33, 1; ii. 34, 2; v. 42, 15; v. 52, 16; v. 60, 5; vi. 50, 4; vi. 66, 3; vii. 56, 1; viii. 7, 3, 17; viii. 20, 17). They are, however, said to be like sons to Indra (i. 100, 5); and they are also called *sindhu-mâtarah*, children of the ocean, whether we suppose this to be the aerial or terrestrial sea (x. 78, 6), and sons of heaven, *divac-putrâṇaḥ* (x. 77, 2). They are frequently associated with Indra, as we have already seen (compare i. 23, 7, 8; i. 100, 1 ff.; i. 101, 1 ff.; i. 169, 1 ff.; iii. 32, 3, 4; iii. 35, 9; iii. 47, 1 ff.; iii. 51, 7 ff.; v. 29, 1, 2, 6; v. 57, 1; vi. 19, 11; vii. 32, 10; vii. 42, 5; viii. 36, 1 ff.; viii. 52, 10; viii. 65, 1 ff.; viii. 78, 1 ff.; viii. 85, 7 ff.; viii. 7, 24; x. 73, 1 ff.; x. 99, 5; x. 113, 3); but they are also celebrated separately in numerous hymns (as i. 37; i. 38; i. 39; i. 64; i. 85; i. 86; i. 87; i. 88; i. 166; i. 167; i. 168; iii. 52; iii. 53; iii. 54; iii. 55; iii. 56; vii. 56; vii. 57; vii. 58, etc.) They are favourite deities of some of the rishis, and are often praised in highly poetical strains. They are like blazing fires, free from soil, of golden or tawny hue, and of sunlike brilliancy (vi. 66, 2; vii. 59, 11; viii. 7, 7). They are also compared to swans with black plumage (vii. 59, 7); and are sometimes said to be playful as children (i. 166, 2; x. 78, 6). They are thus apostrophised in v. 54, 11: "Spears rest upon your shoulders, ye Maruts; ye have anklets on your feet, golden ornaments on your breasts, fiery lightnings in your hands, and golden helmets² on your heads." (Compare i. 64, 4; i. 166, 10;

¹ This word is perhaps a personification of the speckled clouds. See Roth's *Illustrations of Nirukta*, x. 39, p. 145.

² In ii. 84, 3, the epithet of *hiranya-ṣiprāḥ* is applied to these deities. This Sâyana explains by *svarnamaya-ṣirastrāṇāḥ*, "with golden helmets." That one sense of *ṣiprā* (feminine) is "a head-dress, or a helmet," is settled by v. 54, 11, where the words are *ṣiprāḥ ṣiraḥsu vitatāḥ hiraṇyayih*, "golden helmets are stretched (or placed) upon your heads;" and also by viii. 7, 25, where it is said, *ṣiprāḥ ṣiraḥsu hiraṇyayih . . . cyanjata ṣriye*, "they displayed for ornament golden helmets on their heads." In the first of these passages, Sâyana interprets *ṣiprāḥ* as meaning a "turban," in the second a "helmet." This shews that *ṣiprāḥ*, in these texts at least, must mean something external to the head, and not a feature of

ii. 34, 2, 3; v. 53, 4; v. 55, 1; v. 57, 5, 6; v. 58, 2; vii. 56, 11, 13; viii. 7, 25; viii. 20, 4, 11, 22; x. 78, 2). They are armed with golden weapons, and with lightnings, dart thunderbolts, and are borne along with the fury of the winds (v. 54, 3; viii. 7, 4, 17, 32; x. 78, 2, 3); they split Vṛtra into fragments (viii. 7, 23); they are clothed with rain (v. 57, 4); they distribute showers all over the world, and avert heat (v. 54, 1; v. 55, 5; viii. 7, 4, 16). They open up a path for the sun (viii. 7, 8). They shake the mountains, the earth, and both the worlds (i. 37, 8; i. 39, 5; i. 87, 3; v. 54, 1, 3; v. 60, 2, 3; vii. 57, 1; viii. 7, 4; viii. 20, 5). They overturn trees, and, like wild elephants, they devour the forests (i. 39, 5; i. 64, 7). They have iron teeth (i. 88, 5); they roar like lions (i. 64, 8); all creatures are afraid of them (i. 85, 8). Their weapons are of various descriptions—spears, bows, quivers, and arrows (i. 37, 2; v. 57, 2). They are swift as thought (i. 85, 4). They ride, with whips in their hands (i. 37, 3), in golden cars (v. 57, 1),

the face, as it is often interpreted, when applied to Indra. Thus *sipra* is explained by Sayana on i. 9, 3, as meaning *gobhana-hano gobhana-nuska va*, "having handsome jaws, or a handsome nose," since Yaska, he says, makes *spra* to mean one or other of these two parts of the face (Nirukta, vi. 17). The same explanation is given by Sayana on i. 29, 2, i. 81, 4, and i. 101, 10. On ii. 30, 3, however, the same commentator says *spra-gobhana srastrānam abdhīgate gobhana-srastrānopetah | yadva gobhana-hanuman*, "By the word *spra*, a helmet is signified. *Susiprah* therefore means 'having a handsome helmet,' or it means 'having handsome jaws.' On iii. 32, 3, iii. 36, 10, vii. 32, 4, 24; viii. 33, 7; viii. 55, 4, he returns to the latter interpretation. On vii. 17, 4, viii. 81, 4, viii. 82, 12, he again gives the alternative explanation as on iii. 30, 3.

Professor Aufrecht has favoured me with a note on the subject of the word *spra* and its derivatives, of which the following are the most important parts. *Spra* in the dual means jaws (i. 101, 10, iii. 32, 1, v. 36, 2, viii. 65, 10, x. 96, 9, x. 105, 5). *Spravat* means "having large jaws" (vi. 17, 2). *Sprin* means the same, and is used only of Indra (i. 29, 2, i. 81, 4, iii. 36, 10, etc. etc). *Spruit*, as Prof. Aufrecht considers, means "a draught (imbued by the jaws)," and he translates i. 30, 11, thus ("Receive") our draughts, thunderer, soma-drinker, friend of thy friends the soma-drinkers. *Spruitat* (x. 105, 5) will thus be "he who possesses the draught." *Sprah* in v. 54, 11, and vii. 7, 25, are "visors," the two parts of which are compared to two jaws. *Ayah-spra*, used of the Rbhus (ix. 37, 4) will consequently mean "having iron visors." The word occurs in other compounds, to which I need not here refer.

I am not sufficiently acquainted with the armour of India to know whether any thing like a visor was or is used by warriors in that country. It is, however, customary for the Hindus in particular circumstances (as for protection from the heat, and also from the cold, and for purposes of disguise) to wear their turbans not only wrapped horizontally round their heads, but also perpendicularly under their chins and over the tops of their heads, thus enclosing the sides of their faces.

with golden wheels (i. 64, 11; i. 88, 5), drawn by ruddy and tawny horses (with which the chariots are said to be winged), and flashing forth lightnings (i. 88, 1, 2; v. 57, 4). The animals by which these chariots are described as being drawn are designated in some places by the epithet *pr̥shatīḥ* (i. 37, 2; i. 39, 6; i. 85, 5; viii. 7, 28), which Prof. Wilson—following Sâyaṇa on Rig-veda, i. 37, 2¹—renders by “spotted deer.” But in i. 38, 12, the horses (*aṣvāsaḥ*) of the Maruts are spoken of; as is also the case in viii. 7, 27, where they (the horses) are called *hiranya-pāṇibhiḥ*, “golden-footed;” though in the next verse (28) the *pr̥shatīḥ* are again spoken of, as well as a *pr̥shatīḥ rohitaḥ*, which Sâyaṇa understands to denote either a swift buck, or a buck yoked as a leader to the does. In i. 87, 4, the troop of Maruts itself receives the epithet *pr̥shad-aṣva*, “having spotted horses.” This is, indeed, explained by Sâyaṇa in the sense of “having does marked with white spots instead of horses;”² but in his notes on v. 54, 2, 10, and v. 55, 1, where the Maruts’ horses are again spoken of, he does not repeat this explanation. In v. 55, 6, where the Maruts are described as having yoked *pr̥shatīḥ* (feminine) as horses (*aṣvān*, masculine) to their chariots, Sâyaṇa says we may either understand “spotted mares,” or suppose the word “horse” to stand for doe (*pr̥shatīḥ . . pr̥shad-varṇā vadavāḥ | sârangī vā atra aṣva-ṣabda-vâchyā*). In his note on *pr̥shatibhiḥ* in ii, 34, 3, he says they may be either does marked with white spots, or mares; and he interprets *pr̥shatīḥ* in v. 57, 3, by *aṣvāḥ*, mares. Professor Aufrecht, who has favoured me with a note on the subject of the word *pr̥shatīḥ*, is of opinion, that, looking to all the passages where it occurs in connection with the Maruts, it must mean mares.³

¹ *Pr̥shatyo vindu-yuktā mṛgyo Marud-vāhana-bhūtāḥ | “pr̥shatyo Marutām” iti Nighaṇṭūv uktatrūt |* See also his note on the same word in ii. 34, 3.

² Benfey, in his translation of this verse (Orient. und Occident, ii. 250) retains the sense of antilopes. In vii. 56, 1, the Maruts are styled *svaṣvāḥ*, “having good horses,” which Sâyaṇa explains *śobhana-vāhāḥ*, “having good carriers.”

³ Prof. Aufrecht has pointed out a number of passages regarding the sense of the words *pr̥shad-aṣva* and *pr̥shat*, as Râyamukūṭa on Amara, the Vāj. Sanh. xxiv. 11, 18; Śatapatha Brâhmaṇa, v. 5, 1, 10, and v. 5, 2, 9. He has also indicated another verse of the Rig-veda (v. 58, 6) where *pr̥shatibhis* in the feminine is joined with *aṣvaiḥ* in the masculine; and remarks that viii. 54, 10, 11, could not

Some traces are perceptible in the Rig-veda of a dispute between the votaries of the Maruts and those of Indra in regard to their respective claims to worship. Thus in hymns 165 and 170 of the first book of the R.V. we find dialogues in the first case between Indra and the Maruts, and in the second between Indra and Agastya, regarding the respective claims of these deities to worship. In i. 165, 6, Indra asks, "Where was your inherent power, ye Maruts, when ye left me alone¹ in the conflict with Ahi? It was I who, fierce, strong, and energetic, overturned my enemies with my shafts." The Maruts rejoin: "7. Vigorous god, thou hast done great things with us for thy helpers, through our equal valour; for, O strong Indra, we Maruts by our power perform many great exploits when we desire." Indra replies: "8. By my own prowess, Maruts, I slew Vṛtra, mighty in my wrath," etc.

Of hymn i. 170, the Nirukta says, i. 5, that "Agastya, having prepared an oblation for Indra, desired to give the Maruts also a share in it. On which Indra came and complained." The Maruts reply, v. 2: "Why dost thou seek to kill us, Indra? The Maruts are thy brothers. Act amicably towards them. Do not kill us in the fray."² Indra then says to Agastya, v. 3: "Why dost thou, brother Agastya, being our friend, disregard us? For we know how thy mind is. Thou wilt not give us anything."—(See Roth's *Elucidations of Nirukta*, p. 6.)

In the following passages the Maruts are said to worship Indra, *vis.*: iii. 32, 3; v. 29, 1, 2, 6; vi. 17, 11; viii. 3, 7; viii. 78, 1; viii. 78, 3.

IX. SŪRYA AND SAVITR.

The great powers¹ presiding over day and night are, as we have seen above, supposed by the Indian Commentators to be personified in Mitra and Varuṇa. But these deities, and

mean that the rishi received a thousand antelopes. Prof. Roth appears, from a remark under the word *śta* (vol. i. p. 1091 of his Dict.) to regard *prshatyah* as a kind of deer.

¹ See above, p. 94.

² See Roth on this text, *s.v. kalp*.

especially Varuṇa, as described in the Veda, are far more than the mere representatives of day and night. They are also recognized as moral governors, as well as superintendents of physical phenomena. There are two other gods (also, as has been already noticed, reckoned in a few passages as belonging to the Âdityas),¹ who are exact personifications of the sun, viz.: Sûrya and Savitr. It is under these two different appellations that the sun is chiefly celebrated in the Rig Veda; and although it may be difficult to perceive why the one name should be used in any particular case rather than the other, the application of the names may perhaps depend upon some difference in the aspect under which the sun is conceived, or on some diversity in the functions which he is regarded as fulfilling. Different sets of hymns are, at any rate, devoted to his worship under each of these names, and the epithets which are applied to him in each of these characters are for the most part separate. In some few places, both these two names, and occasionally some others, appear to be applied to the solar deity indiscriminately, but in most cases the distinction between them is nominally, at least, preserved.

The principal hymns, or portions of hymns, in praise of Sûrya are the following:—i. 50, 1-13; i. 115, 1-6; iv. 13, 1-3; iv. 45, 6; v. 5, 6, 8, 9; v. 45, 9, 10; v. 59, 5; vii. 60, 1-4; x. 37, 1 ff. He is treated in Nirukta, xii. 14-16.

Sûrya is described as moving on a car, which is sometimes said to be drawn by one, and sometimes by several, or by seven fleet horses² (i. 115, 3, 4; vii. 60, 3; vii. 63, 2; ix. 63, 8; x. 37, 3; x. 49, 7. His path is prepared by the Âdityas, Mitra, Aryaman, and Varuṇa (i. 24, 8; vii. 60, 4; vii. 87, 1). Pûshan goes as his messenger with his golden ships, which sail in the aerial ocean* (vi. 58, 3). He is the preserver and soul of all things stationary and moving

¹ In x. 88, 11, Sûrya is styled Âditeya; and in viii. 90, 11, Âditya. In other places, viii. 35 ff. and 13 ff., he is mentioned separately from the Âdityas; but so also is Varuṇa in viii. 35, 1.

² Indra is said to traverse the sky with the sun's horses (x. 49, 7). Compare Ovid's description of Phaethon's horses, Metam. ii. 153.

(i. 115, 1; vii. 60, 2) and the vivifier (*prasavita*¹) of men (vii. 63, 2, 4). He is far-seeing, all-seeing;² beholds all creatures and the good and bad deeds of mortals (iv. 1, 7; vi. 51, 2; vii. 35, 8; vii. 60, 2; vii. 61, 1; vii. 63, 1, 4; x. 37, 1). He is the eye³ of Mitra and Varuṇa (i. 115, 1;⁴ vi. 51, 1; vii. 61, 1; vii. 63, 1; x. 37, 1. Compare vii. 76, 1; x. 10, 9; x. 16, 3). He knows the three spheres and separate races of the gods (vi. 51, 2). He upholds the sky (x. 85, 1). He rolls up darkness like a hide (vii. 63, 1). He is said to be, through his greatness, the divine leader or priest (*asuryah purohitaḥ*) of the gods (viii. 90, 12). In viii. 82, 1, 4, he is identified with Indra. In x. 170, 4, the epithets *viṣvakarman*, the architect of the universe, and *viṣvadevavat*, the sovereign deity, are applied to him (as in viii. 87, 2, Indra also is styled *viṣvakarman* and *viṣvadevaḥ*). In vii. 60, 1, and vii. 62, 2, he is said to declare men sinless to Mitra, Varuṇa, etc.

In many passages, however, the dependent position of Sūrya is asserted. Thus he is said to have been produced, or caused to shine, or to rise, or to have his path prepared, etc., by Indra (ii. 12, 7; iii. 31, 15; iii. 32, 8; iii. 44, 2; iii. 49, 4; vi. 17, 5; viii. 78, 7;⁵ viii. 87, 2; x. 171, 4); by Indra and Soma (vi. 72, 2); by Agni (x. 3, 2; x. 88, 6; x. 156, 4); by Soma (vi. 44, 23; ix. 63, 7; ix. 75, 1; ix. 86, 29; ix. 96, 5; ix. 97, 41; ix. 107, 7; ix. 110, 3); by Dhātṛ (x. 190, 3); by Varuṇa (i. 24, 8; vii. 87, 1); by Mitra and Varuṇa (iv. 13, 2; v. 63, 4, 7; vii. 82, 3); and by the Angirases through their rites (x. 62, 3). He is declared to be god-born (x. 37, 1), to be the son of the sky (*ibid.*), to have been drawn by the gods from the ocean where he was hidden (x. 72, 7), to have been

¹ This word and others derived from the same root *śá*, are, as we shall shortly see, very frequently applied to Savitr. In x. 66, 2, the gods are said to be *Indra-prasavitaḥ*.

² The classical poets also describe the sun as all-seeing. See Æschylus, *Prom.* 91, Homer, *Iliad*, iii. 277, xiv. 344, *Odyssey*, viii. 270. Ovid, *Metam.* iv. 171 f., 198 f.

³ Compare the expression of Hesiod, *Opp. et Diss.* 265 (quoted by M. Müller, *Oxford Essays* for 1856, p. 63), πάντα ἰδὼν Διὸς ὀφθαλμοῖς καὶ πάντα νοήσας κ. τ. λ.

⁴ In this verse he is said to be also the eye of Agni.

⁵ In his note on this passage (viii. 78, 7) Sāyana relates a legend, that formerly the Puroḥitas carried off the cows of the Angirases and placed them on a mountain enveloped in darkness, when Indra, after being lauded by the Angirases, and supplicated to restore the cows, caused the sun to rise that he might see them.

placed by the gods in heaven (x. 88, 11, where he is identified with Agni); and to have sprung from the eye of Purusha (x. 90, 13). He is also said to have been overcome by Indra (x. 43, 5; iv. 30, 6), who carried off one of the wheels of his chariot (i. 175, 4).¹

Ushas is in one place said to be his wife (vii. 75, 5); while in another passage (vii. 78, 3) the Dawns are by a natural figure declared to produce him, and in a third passage to reveal him (vii. 80, 2).

The Atharva Veda contains a long hymn to Sûrya, xiii. 2.

The Mahâbhârata (iii. 166 ff.) has a hymn to the same god, in which he is styled the eye of the world, and the soul of all embodied beings (v. 166); and his divine chariot is referred to (v. 170).

SAVITR.

The hymns which are devoted to the celebration of Savitr are the following: i. 35; ii. 38; iv. 53; iv. 54; v. 81; v. 82; vii. 38; vii. 45; vii. 63; with many detached passages and verses, such as, i. 22, 5-8; iii. 56, 6, 7; iii. 62, 10-13, etc. etc.

The epithets, characteristics, and functions of this god, as described in the Rig Veda, are as follows:

He is pre-eminently the golden deity, being *hiraṇyāksha*, golden-eyed (i. 35, 8); *hiraṇya-pâṇi*,² *hiraṇya-hasta*, golden-handed (i. 22, 5; i. 35, 9, 10; iii. 54, 11; vi. 50, 8; vi. 71, 4; vii. 38, 2); *hiraṇya-jihva*, golden-tongued (vi. 71, 3); *su-jihva*, beautiful-tongued (iii. 54, 11; vii. 45, 4); *mandra-jihva*, pleasant-tongued (vi. 71, 4). He invests himself with golden or tawny mail (*piṣangam drâpim*, iv. 53, 2); and assumes all forms (v. 81, 2). He is also *harikeṣa*, the yellow-haired (x. 139, 1). Luminous in his aspect, he ascends a golden car

¹ See iv. 17, 14; vi. 56, 3.

² See the tasteless explanations of this epithet given by the commentator and the Kaushîtakî Brâhmaṇa, as mentioned in Rosen's and Wilson's notes on i. 22, 5; and see also Weber's Ind. Studien, ii. 306. The same epithet is given to Savitr in the Vâj. Sanhitâ, i. 16, where see the commentary. Savitr is also called *prthupâṇi*, broad-handed (ii. 38, 2), and *supâṇi*, beautiful-handed (iii. 33, 6; vii. 45, 4). Tvashtar, too, is called *supâṇi* (iii. 54, 12), as are also Mitra and Varuṇa (iii. 56, 7).

(i. 35, 2, 4, 5) drawn by radiant horses (*ib.* *vv.* 3, 5; and vii. 45, 1); and beholding all creatures, he pursues an upward and a downward path (i. 35, 2, 3). Surrounded by a golden lustre (iii. 31, 8; vii. 38, 1; vii. 45, 3), he illuminates the atmosphere, and all the regions of the earth (i. 35, 7, 8; iv. 14, 2; iv. 53, 4; v. 81, 2). His golden arms,¹ which he stretches out to infuse energy into all creatures, reach to the utmost ends of heaven (ii. 38, 2; iv. 53, 3, 4; vi. 71, 1, 5; vii. 45, 2). In one place, however, (vi. 71, 4), he is called *ayohanu*, the iron-jawed, though even there the commentator says that *ayas*, which ordinarily means iron, is to be rendered by gold. His ancient paths in the sky are said to be free from dust (i. 35, 11). He is called (like Varuṇa and others of the gods) *asura*, a divine spirit (i. 35, 7, 10; iv. 53, 1). His will and independent authority cannot be resisted by Indra, Varuṇa, Mitra, Aryaman, Rudra, or by any other being (ii. 38, 7, 9; v. 82, 2). He observes fixed laws (iv. 53, 4; x. 34, 8; x. 139, 3). The other gods follow his course (v. 81, 3). The waters and the wind obey his ordinance (ii. 38, 2). His praises are celebrated by the Vasus, by Aditi, by the royal Varuṇa, by Mitra and by Aryaman (vii. 38, 3, 4). He is lord of all desirable things (i. 24, 3), and sends blessings from the sky, from the atmosphere, and from the earth (ii. 38, 11). He impels the car of the Aśvins before the dawn (i. 34, 10). He is *prajāpati*,² the lord of all creatures, the supporter of the sky and of the world (iv. 53, 2; iv. 54, 4; x. 149, 1, 4).³ He measures the mundane regions (v. 81, 3). He bestows immortality on the gods (iv. 54, 2 = Vāj. Sanh. xxxiii. 54) as

¹ Indra, too, is called *hiranya-bāhu*, golden-armed, vii. 24, 4. Agni is said to raise aloft his arms like Savitr, i. 95, 7. In vii. 79, 2, the Dawns are said to send forth light as Savitr stretches out his arms. In i. 190, 3, also the arms of Savitr are alluded to. In vii. 62, 5, Mitra and Varuṇa are supplicated to stretch out their arms.

² In the Taittirīya Brāhmaṇa, i. 6, 4, 1 (p. 117), it is said, *Prajāpatiḥ Savitā dhātāvā prajā asṛjate*, "Prajāpati, becoming Savitr, created living beings." On the relation of Savitr and Prajāpati see Weber, "Umana und Portenta," pp. 386, 392, and the passage of the Śatapatha Brāhmaṇa, x. 3, 5, 1, where it is said that people are accustomed to identify Savitr with Prajāpati, *Yo hy eva Savitā sa Prajāpater ity evaṁbrūh*, etc. etc.

³ It is not clear whether it is Savitr or the aerial ocean (*asamudra*) from which earth, atmosphere, and sky are said in x. 149, 2, to have sprung. See Orig. Sansk. Texts, iv. 98.

he did on the Rbhus (i. 110, 3). He is supplicated to deliver his worshippers from sin (iv. 54, 3).

Savitr is sometimes called *apām napāt*, son of the waters, an epithet which is more commonly applied to Agni.

The word Savitr is defined by Yāska (Nirukta, x. 31) as meaning *sarvasya prasavitā*, but he does not explain in what sense *prasavitā* is to be taken. The root *su* or *sū* from which it is derived has three principal significations, (1) to generate or bring forth; (2) to pour forth a libation; and (3) to send or impel. When treating of the derivatives of this root as applied to Savitr, Śāyana sometimes gives them the sense of sending or impelling, and sometimes of permitting or authorizing (*anyādā*). In a few places he explains the root as meaning to beget. (Thus on i. 113, 1, he renders *prasūtā* by *utpannā*, and *savah* by *utpattih*). The word *prasavitr*, as well as various other derivatives of the root *su*, are introduced in numerous passages of the Rig Veda relating to the god Savitr, with evident reference to the derivation of that name from the same root, and with a constant play upon the words,¹ such as is unexampled in the case of any other deity.

The following are some of the passages of the Rig Veda in which these derivatives occur:

i. 124, 1. "The god Savitr hath impelled or aroused (*prāśriti*) our two-footed and four-footed property to go."

i. 157, 1. "The god Savitr has aroused (*prāśriti*) each moving thing" (*jagat*: comp. i. 159, 3).

v. 81, 2 (-Vāj. Saṁh. xii. 3). "The wise (Savitr) puts on (or, manifests) all forms. He hath sent (*prāśriti*) prosperity to biped and quadruped. The eminent Savitr has illuminated the sky. He shines after the path of the Dawn." 5. "Thou alone art the lord of vivifying power (*prasavasya*).

i. 159, 5. "That desirable wealth we to-day seek through the vivifying power (*prasave*) of the divine Savitr."

¹ See Roth's Illustrations of the Nirukta, p. 76. I cannot say whether this feature in the hymns in question affords any sufficient ground for regarding them as artificial in character, and consequently as comparatively late in their origin. To form a judgment on this point, it would be necessary to compare them in other respects with the other hymns.

iii. 33, 6 (Nir. ii. 26). "The god Savitr hath led (us, i.e. the waters); by his propulsion (*prasave*) we flow on broadly."

ii. 38, 1. "The god Savitr hath arisen to impel (or vivify, *savāya*) us, he who continually so works, the supporter."

viii. 91, 6. "I invoke the sea-clothed Agni, as (I invoke) the vivifying power (*savam*¹) of Savitr, and the enjoyments of Bhaga."

iii. 56, 6. "Thrice every day, O Savitr, send (*āsuva*) us desirable things from the sky. 7. Thrice Savitr continues to send down (these things to us) from the sky; and so also do the fair-handed Mitra and Varuṇa. Even the waters, even the spacious heaven and earth, have solicited wealth to (call forth?) the vivifying power (*savāya*) of Savitr."

iv. 53, 3. "Savitr hath stretched out his arms in his vivifying energy (*sarimani*²), stablishing and vivifying (*prasavan*) all that moves, by his rays. 6. May that god Savitr who bestows great happiness, the vivifier (*prasacitā*), the stablisher, who is lord both of that which moves and of that which is stationary, bestow on us protection."

iv. 54, 3. "Whatever (offence) we have committed against gods or men, do thou, O Savitr, render (*suvalāt*) us sinless."

v. 82, 3. "For he, Savitr, who is Bhaga, (or the adorable, *bhaga*), sends (*surāti*) wealth to his worshipper. 5. Send (*sacitā*) to-day, O divine Savitr, prosperity with progeny: send away (*parā suva*) sleeplessness (comp. x. 37, 4). 5. Send away (*parā suva*), O divine Savitr, all calamities; send (*āsuva*) us what is good. 6. May we, being sinless to Aditi, through the influence (*sava*) of the divine Savitr, possess all things desirable. 7. We worship to-day, with hymns, Savitr, who possesses true energy (*satya-sava*³), the god of all (gods), the lord of the good."

vi. 71, 1. "The potent god Savitr hath stretched out his golden arms to vivify (or impart energy, *savanāya*)

¹ In i. 164, 26, and ix. 67, 26, particularly in the latter passage, *sava* may mean a libation of soma.

² This word also occurs in Sāma Veda, i. 464.

³ The same epithet is applied to him in x. 38, 13. It occurs also in the Sāma Veda, i. 464.

2. May we abide (have a share ?) in the excellent vivifying power (*savtmani*; compare x. 36, 12) of the god Savitr, and in the bestowal of wealth by thee, who continuest to establish and vivify (*niveṣane prasave cha*) the entire two-footed and four-footed world 4. This god Savitr sends (*suṇāti*) to his worshipper many desirable things 6. Send (*sāvītḥ*) to us to-day, Savitr, what is desirable; send it to us to-morrow, and every day."

vii. 38, 2. "Rise, Savitr, sending (*āsuṇāna*) to men the food which is fit for mortals. 4. Whom (*i.e.* Savitr) the goddess Aditi praises, desiring the vivifying power (*savam*) of the divine Savitr."

vii. 40, 1. "May we partake in the distribution (of wealth) which the opulent god Savitr shall send (*suṇāti*) to-day."

vii. 45, 1. "May the god Savitr approach, rich in gems, filling the atmosphere, borne by horses, holding in his hand many gifts suitable for men, establishing and vivifying (*prasu-vaṇ*) the world. 8. The powerful god Savitr, lord of wealth, hath sent (*sāvishat*) us riches."

x. 35, 7. "Send (*āsuva*) us to-day, O god Savitr, a most excellent and desirable portion," etc.

x. 36, 4. "May Savitr send (*suṇātu*) all prosperity," etc.

x. 64, 7. "For they (Vāyu and Pūshan), with one heart and one mind, seek after strength in the vivifying power (*savtmani*) of the god Savitr."

x. 100, 8. "May Savitr remove (*apasāvishat*) sickness."

x. 139, 1. "Invested with the solar rays, with yellow hair, Savitr raises aloft his light continually from the east. In his energy (*prasave*) the wise Pūshan marches, beholding all worlds, a guardian."

The preceding passages will suffice to show the extent to which this play on words is carried in the hymns addressed to Savitr.

Derivatives from the same root are, as we have already seen, also applied to Sūrya, as *prasavitā* and *prasūtah*, in R. V. vii. 63, 2 and 4; and *apasuva* in x. 37, 4; to Indra (*haryaṣva-prasūtāḥ*, iii. 30, 12); to Varuṇa (*parāsuva*, ii. 28, 9); and to Mitra, Aryaman, Savitr, and Bhaga (*suṇāti*, vii. 66, 4).

In vii. 77, 1, Ushas (the Dawn) is said to incite (*prasuvanti*) all life to motion. In viii. 18, 1, the impulse, vivifying power, or favouring aid (*santmani*) of the Âdityas is referred to.

Savitṛ is sometimes expressly distinguished from Sûrya. Thus he is said in i. 35, 9, to approach or (according to Benfey's rendering) to bring the sun (Sûrya);¹ in i. 123, 3, to declare men sinless to the sun (Sûrya); and in v. 81, 4, to combine with the rays of the sun (Sûrya). In explanation of the last passage, Sâyana remarks, that before his rising the sun is called Savitṛ, and at his rising and setting, Sûrya. And similarly Yâska says (Nirukta xii. 12) that "the time of Savitṛ's appearance is when darkness has been removed, and the rays of light have become diffused over the sky;" and in proof of this he refers to v. 81, 2, quoted above. It is scarcely consistent with this explanation, however, that in vii. 66, 4, Savitṛ is said, along with Mitra (the god of the day), and Aryaman and Bhaga, to bestow blessings after the rising of the sun. Again, in x. 139, 1, Savitṛ is termed *sûrya-raṣmi*, "invested with the rays of Sûrya;" and in vii. 35, 8 and 10, as well as x. 181, 1, the two gods are separately mentioned. In other texts, however, the two names appear to denote the same deity, as in i. 35, 7; i. 124, 1; iv. 14, 2; x. 158, 1-5; and vii. 66, 1-4 (where the functions expressed by the derivatives of the root *su*, which, as we have seen, are most generally assigned to Savitṛ, are predicated of Sûrya). In i. 157, 1, it is not very clear whether the two names are to be understood of one god, or of two.

In v. 81, 4 and 5, Savitṛ is identified with Mitra and Pûshan, or is, at least, described as fulfilling the proper function of those gods. And similarly in v. 82, 1. 3; and vii. 38, 1, 6 (unless *bhaga* is a simple epithet), Savitṛ is identified with the god of that name. On the other hand, he is clearly distinguished from these and other deities, in such texts as

¹ Sâyana remarks here that, though the godhead of Savitṛ and Sûrya is identical, they may yet, from their representing different forms, be spoken of as respectively approaching and approached.

² As in another place (x. 12, 8), he is supplicated, along with Mitra and Aditi, to declare the worshippers sinless to Varuṇa.

iii. 54, 11, 12; vi. 21, 9; vi. 49, 14; vi. 50, 1, 13; viii. 18, 3; viii. 91, 6; x. 139, 1.

The word Savitr̥ is not always a proper name; but is sometimes used as an epithet. Thus in ii. 30, 1, it seems to express an attribute of Indra; and in iii. 55, 19, and x. 10, 5, to be, as well as *viṣvarūpa*, an epithet of Tvashtṛ.

X. AGNI.

Agni is the god of fire, the Ignis of the Latins. He is one of the most prominent deities of the Rig Veda, as the hymns addressed to him far exceed in number those which are devoted to the celebration of any other divinity, with the sole exception of Indra. Agni is not, like the Greek Hephaistos, or the Latin Vulcan, the artificer of the gods (an office which, as we shall presently see, is in the Veda assigned to Tvashtṛ), but derives his principal importance from his connection with the ceremonial of sacrifice. He is an immortal (i. 44, 6; i. 58, 1; ii. 10, 1, 2; iii. 2, 11; iii. 3, 1; iii. 11, 2; iii. 27, 5, 7; vi. 9, 4; vii. 4, 4; x. 79, 1), who has taken up his abode among mortals as their guest (i. 44, 4; i. 58, 6; ii. 4, 1; iii. 2, 2; iv. 1, 20; v. 1, 8; v. 8, 2; v. 18, 1; vi. 2, 7; vi. 15, 1, 4; vii. 8, 4; viii. 73, 1; x. 1, 5; x. 91, 2). He is the domestic priest, *purohita*, *ṛtvik*, *hotṛ*, *brahman* (i. 1, 1, 3, 8; i. 12, 1; i. 13, 1, 4; i. 26, 7; i. 36, 3, 5; i. 44, 1, 7, 9, 12; i. 45, 7; i. 58, 1, 6; i. 60, 4; i. 68, 4; i. 74, 6; i. 127, 1; i. 141, 1, 12; i. 149, 4, 5; i. 188, 3; ii. 5, 1; ii. 6, 6; ii. 9, 1; iii. 4, 1; iii. 7, 9; iii. 14, 1; iii. 19, 1; iii. 10, 2, 9; iii. 11, 1; iv. 1, 8; v. 11, 2; v. 26, 7; vi. 15, 4, 13; vi. 16, 6; vii. 7, 5; vii. 10, 2; vii. 11, 5; vii. 16, 5, 12; viii. 44, 6; viii. 49, 1; ix. 66, 20; x. 1, 6), appointed both by men and gods, who performs in a higher sense all the various sacrificial offices which the Indian ritual assigned to a number of different functionaries (i. 94, 6; ii. 1, 2; ii. 5, 2, 3; iv. 1, 8; iv. 9, 3, 4; x. 2, 2; x. 91, 10). He is a sage, the divinest among sages (*asuro vipaśchitām*, iii. 3, 4), intimately acquainted with all the forms of worship, the wise director, the successful accomplisher, and the protector, of all

ceremonies (i. 1, 4; i. 31, 1; iii. 3, 3; iii. 21, 3; iii. 27, 2, 7, 8; x. 91, 3, 8; vi. 14, 2; vii. 4, 4), who enables men to serve the gods in a correct and acceptable manner, in cases where this would be beyond their own unaided skill (x. 2, 3-5). He is the father, king, ruler, banner, or outward manifestation (*ketu*),¹ and superintendent, of sacrifices and religious duties (iii. 3, 3, 4; iii. 10, 4; iii. 11, 2; iv. 3, 1; vi. 2, 3; viii. 43, 24; x. 1, 5; x. 6, 3). He is also the religious leader or priest of the gods (x. 110, 11; x. 150, 4). He is a swift (*raghupatvá*, x. 6, 4) messenger, moving between heaven and earth, appointed both by gods and by men to maintain their mutual communications, to announce to the gods the hymns, and to convey to them the oblations, of their worshippers (i. 12, 1, 2, 4, 8; i. 27, 4; i. 36, 3, 4, 5; i. 44, 2, 3, 5, 9, 12; i. 58, 1; i. 74, 4, 7; i. 188, 1; ii. 6, 6; ii. 9, 2; ii. 10, 6; iii. 5, 2, 11; iii. 6, 5; iii. 8, 6; iii. 9, 8; iii. 11, 2; iii. 17, 4; iii. 21, 1, 5; iv. 1, 8; iv. 2, 3; iv. 7, 8; iv. 8, 2, 4; v. 8, 6; v. 21, 3; vi. 15, 8-10; vii. 11, 4; vii. 16, 4; vii. 17, 6; viii. 19, 21; viii. 23, 18, 19; viii. 39, 1, 9; viii. 44, 3; x. 4, 2; x. 46, 10; x. 91, 11; x. 122, 7). Being acquainted with the innermost recesses of the sky (iv. 8, 2, 4), he is well fitted to summon the gods to the sacrifices; and he comes with them seated on the same car (iii. 4, 11; vii. 11, 1), or in advance of them (x. 70, 2). He brings Varuna to the ceremony, Indra from the sky, the Maruts from the air (x. 70, 11). Without him the gods experience no satisfaction (vii. 11, 1). He himself offers them worship (vii. 11, 3; viii. 91, 16; x. 7, 6). He is the mouth and tongue through which both gods and men taste the sacrifices (ii. 1, 13, 14). He is elsewhere asked to eat the offerings himself (iii. 21, 1 ff.; iii. 28, 2-6), and invited to drink the soma-juice (i. 14, 10; i. 19, 9; i. 21, 1, 3).

The 51st hymn of the tenth book contains a dialogue between Agni and the other gods, in which they give utterance to their desire that he would come forth from his concealment,

¹ His father begot him (*janitá teá jayána*) to be the revelation and brilliant banner of all sacrifices. With the phrase, *janitá teá jayana*, compare the expressions in x. 20, 9, also relating to Agni, and in iv. 17, 4, relating to Indra.

and try to persuade him to appear and convey to them the customary oblations. After he has expressed some timid apprehension (*vv.* 4, 6), he is induced (as it would seem) by the promise of long life and a share in the sacrifice to accede to their request. In the next following hymn (the 52nd) Agni proclaims himself the master of the ceremonies, declares himself ready to obey the commands of the gods, and asks how and by what path he can bring them the oblations. Agni is the lord, protector, and leader of the people, *viṣpati*, *viṣāṃ gopā*, *viṣāṃ pura etā* (i. 12, 2 ; i. 26, 7 ; i. 31, 11 ; i. 96, 4 ; ii. 1, 8 ; iii. 11, 5) ; the king or monarch, or king of men (i. 59, 5 ; ii. 1, 8 ; iii. 10, 1 ; v. 4, 1 ; vi. 7, 1 ; vii. 8, 1 ; viii. 43, 24). He is also the lord of the house, *gr̥hapati*, dwelling in every abode (i. 12, 6 ; i. 36, 5 ; i. 60, 4 ; v. 8, 2 ; vii. 15, 2 ; x. 91, 2). He is a father, mother, brother, son, kinsman, and friend (i. 26, 3 ; i. 31, 10, 14, 16 ; i. 75, 4 ; ii. 1, 9 ; vi. 1, 5 ; viii. 43, 16 ; viii. 64, 16 ; x. 7, 3) ; and some worshippers claim with him a hereditary friendship (i. 71, 10). He drives away and destroys Rakshases or demons (iii. 15, 1 ; vii. 13, 1 ; vii. 15, 10 ; viii. 23, 13 ; viii. 43, 26 ; x. 87, 1 ; x. 187, 3). In hymn x. 87, he is invoked to protect the sacrifice (*v.* 9), and to consume the Rakshases and Yâtudhânas by the most terrible manifestations of his fury (*passim*).

Various, though not necessarily inconsistent, accounts are given in the hymns of the birth of Agni. Sometimes a divine origin is ascribed to him, while at other times his production, or at least his manifestation, is ascribed to the use of the ordinary human appliances. Thus he is said to have been brought from the sky by Mâtariṣvan¹ (i. 60, 1 ; i. 93, 6 ; i. 143, 2 ; i. 148, 1 ; iii. 2, 13 ; iii. 5, 10 ; iii. 9, 5 ; vi. 8, 4), to have been generated by Indra between two clouds (ii. 12, 3) ; to have been generated by the sky (x. 45, 8), to be the son of heaven and earth (iii. 2, 2 ; iii. 25, 1 ; x. 1, 2, 7 ; x. 2, 7 ; x. 140, 1), whom he magnified on [or by] his birth (iii. 3, 11). His production is also said to be due to the waters (x. 2, 7 ; x. 91, 6), and to 'Tvaṣṭṛ (i. 95, 2 ; x. 2, 7). He is elsewhere said to have

¹ See my article on Manu in vol. xx. of this Journal, p. 416, note. In one place (vii. 16, 4) he is called the falcon of the sky (*divaḥ syenāya*).

been generated by the gods (vi. 7, 1; viii. 91, 17), as a light to the Ārya (i. 59, 2), or placed by the gods among the tribes of Manu (i. 36, 10; ii. 4, 3; vi. 16, 1; viii. 73, 2). Yet although the son, he is also the father of the gods (i. 69, 1). In viii. 19, 33, his superiority to other fires is shewn by their being declared to be parts of him.

In other passages, however, as in iii. 29, 1 ff., the process of friction, by which the god is daily generated by his worshippers, is described (compare i. 44, 7; i. 68, 2; iii. 23, 2-4; vii. 1, 1; viii. 49, 15). He is produced from two sticks¹ as an infant (v. 9, 3; viii. 23, 25). Strange to say, the child immediately begins, with unnatural voracity, to consume his parents, and is altogether beyond his mortal worshipper's comprehension (x. 79, 4). Like the wriggling brood of a serpent, however, he is sometimes difficult to catch (v. 9, 4). Wonderful is his growth, seeing that he is born of a mother who cannot suckle him (x. 115, 1); but he is nourished and increased by oblations of clarified butter (iii. 21, 1 ff.; v. 11, 3; v. 14, 6; viii. 39, 3; viii. 43, 10, 22; viii. 44, 1; viii. 63, 2; x. 118, 4, 6). He himself is made by the poet to say "butter is my eye" (iii. 26, 7). His epithets are various, and for the most part descriptive of his physical characteristics. He is *ghṛtānnah*, butter-fed (vii. 3, 1; x. 69, 2); *ghṛta-nirṇik*, butter-formed (iii. 17, 1; iii. 27, 5; x. 122, 2); *ghṛta-keśa*, butter haired (viii. 49, 2); *ghṛta-prsthā*, butter-backed (v. 4, 3; v. 37, 1; vii. 2, 4; x. 122, 4); *ghṛtapratīka*, gleaming with butter (iii. 1, 8; v. 11, 1; x. 21, 7); *ghṛta-yoni*, issuing from butter (v. 8, 6); *dhūma-ketu*, smoke-bannered (i. 27, 11; i. 44, 3; i. 94, 10; v. 11, 3; viii. 43, 4; viii. 44, 10; x. 4, 5; x. 12, 2); he sends up his smoke like a pillar to the

¹ Hence, perhaps, it is that he is called *dev-mātā*, born of two parents (i. 31, 2^o 5); and *dev-janma*, having a double birth. i. 60, 1, i. 149, 4, 5). He is, however, also called *bhūrjanma*, having many births (x. 5, 2). In R v i. 95, 2, he is said to be produced by the ten young women, i.e. the ten fingers. See Roth, *Illustrations of Nirukta*, p. 120, Benfey's *Orient and Occident*, ii. 510, and Roth's *Leviçon*, c. *Tvashtṛ*.

In regard to the persons or families by whom the sacrificial fire is supposed to have been first kindled, and the rites of Aryan worship introduced, viz., Manu, Angiras, Bṛhas, Atharvan, Dāhyānu, etc., see my paper on "Manu, the progenitor of the Aryan Indians," in vol. ix of this Journal, pp. 310-316. In viii. 23, 17, Kavya Uṣanas is said to have established Agni to perform invocations on behalf of men.

sky (iv. 6, 2; vii. 2, 1; vii. 3, 3; vii. 16, 3); his smoke is waving, his flame cannot be seized (viii. 23, 1); he is driven by the wind (i. 58, 4, 5; i. 65, 8). He is a destroyer of darkness (i. 140, 1), and sees through the gloom of the night (i. 94, 7). The world which had been swallowed up and enveloped in darkness, and the heavens, are manifested at his appearance, and the gods, the sky, the earth, the waters, the plants rejoice in his friendship (x. 88, 2). He is *chitra-bhānu*, *chitra-śochih*, of varied lustre or blaze (i. 27, 6; ii. 10, 2; v. 26, 2; vi. 10, 3; vii. 9, 3; vii. 12, 1; viii. 19, 2), *ūrdhva-śochis*, upward-flaming (vi. 15, 2), *śukra-śochih*, bright-flaming (vii. 15, 10; viii. 23, 20), *pāvaka-śochis*, with purifying flames (viii. 43, 31), *śukra-varṇa*, *śuchi-varṇa*, bright coloured (i. 140, 1; v. 2, 3), *śochish-keśa*, with blazing hair (i. 45, 6; iii. 14, 1; iii. 17, 1; iii. 27, 4; v. 8, 2), *hari-keśa*, with tawny hair (iii. 2, 13), golden-formed (iv. 3, 1; x. 20, 9; *hiraṇya-rūpam janitā jajāna*), and *hiri-śmasru*, with golden beard (v. 7, 7). He carries sharp weapons (iv. 4, 4; iv. 5, 3), he has sharp teeth (i. 79, 6; i. 143, 5; iv. 5, 4; iv. 15, 5; viii. 19, 22), burning teeth (i. 58, 4; viii. 23, 4), brilliant teeth (v. 7, 7), golden teeth (v. 2, 3), iron grinders (x. 87, 2), and sharp and consuming jaws (viii. 49, 13; x. 79, 1). According to one passage, he is footless, and headless (iv. 1, 12); and yet he is elsewhere said to have a burning head (vii. 3, 1), three heads and seven rays (i. 146, 1; ii. 5, 2), to be four-eyed (i. 31, 13), thousand-eyed (i. 79, 12), and thousand-horned (v. 1, 8).¹ He is *kr̥shṇādhvan*, *kr̥shṇa-carttani*, *kr̥shṇa-pavi*, i.e. his path and his wheels are marked by blackness (ii. 4, 6; vi. 10, 4; vii. 8, 1; viii. 23, 19); he envelopes the woods, consumes and blackens them with his tongue (vi. 60, 10; x. 79, 2); he is all-devouring (viii. 44, 26); driven by the wind, he invades the forests, and shears the hairs of the earth (i. 65, 4), like a barber shaving a beard (x. 142, 4). He causes terror, like an army let loose (i. 66, 8;

¹ In one place (viii. 19, 32) Agni is called *sahasra-mushka*, which the commentator explains by *bahu-tejaska*, having many flames. The same epithet is, in R. V. vi. 46, 3, applied to Indra, where Sâyana makes it equivalent to *sahasra-śepha*, mille membra genitalia habens; and quotes, in proof of this sense, a passage from the Kaushîtakî Brâhmaṇa.

i. 143, 5). His flames roar like the waves of the sea (i. 44, 12; compare i. 58, 4). He sounds like thunder (vii. 3, 6; x. 45, 4), and roars like the wind (viii. 91, 5), like the Maruts (i. 143, 5), like a lion (iii. 2, 11), and like a bull, and the birds are terrified at his ravages (i. 94, 4, 5). He has a hundred manifestations (*śatātmā*), and shines like the sun (i. 149, 4; vii. 3, 6). He is compared to the lightning (i. 143, 5; x. 91, 5), and is borne on a chariot of lightning (iii. 14, 1). His car is luminous¹ (i. 140, 1; i. 141, 12; iii. 3, 5; compare v. 1, 11), variegated (x. 1, 5), golden (iv. 1, 8), beautiful (iii. 3, 9; iv. 2, 4). This car is drawn by swift, beautiful, ruddy, tawny, or omniform horses (i. 14, 6, 12; i. 45, 2; i. 94, 10; i. 141, 12; ii. 4, 2; ii. 8, 1; ii. 10, 2; iv. 1, 8; iv. 2, 2, 4; iv. 6, 9; vi. 16, 43; vii. 16, 2; viii. 43, 16; x. 7, 4; x. 70, 2 f.), which he yokes in order to summon the gods (i. 14, 12; iii. 6, 6, 9; viii. 64, 1).

In some parts of the Rig Veda Agni is regarded as having a triple existence, as the sun in heaven, as lightning in the atmosphere, and as ordinary fire on the earth or in the waters². Thus he is called *trisaḍhasthaḥ*, dwelling in the three spheres (v. 4, 8, comp. x. 56, 1), *arkas tridhātuh*, a triple light (iii. 26, 7), and *tripastyaḥ*, having three abodes (viii. 39, 8). He is said to occupy the three luminaries and all the worlds (i. 149, 4), to have three births, one in the sea³ (*samudre*), one in the heaven (*divi*), and one in the waters or atmosphere (*apsu*, i. 95, 3). In another place (viii. 43, 28) he is only spoken of as born in the sky and in the waters or atmosphere (*dirijā asi apsuḥ*), and similarly in ii. 9, 3 (compare viii. 39, 8), he is said to have an upper and a lower sphere. In x. 91, 6, it is said that the waters, the mothers, generated Agni (compare iii. 1, 3; iii. 9, 4). In x. 88, 10, we are told that "the gods through their power created with a hymn Agni who fills the worlds; they formed

¹ *Chandra-ratha* and *jyotiratha*. The latter epithet is also applied to all the gods x. 63, 4).

² Compare Nirukta vii. 5, and xii. 19, with the comment of Durgā on the latter passage, quoted in "Sanskrit Texts," vol. iv. pp. 55-57.

³ In R. V. viii. 91, 4 (= Sāmā Veda i. 18), Agni is called *samudra-vāsas*, "clothed with, or enveloped by, the ocean."

him to have a threefold¹ existence" (comp. x. 45, 1, 2). In one of the preceding verses (x. 88, 6) it is said that "Agni is at night the head of the earth; and from him springs the sun rising in the morning," i.e. as Yâska says, the sun is identical with him. In a following verse (x. 88, 11) the gods are declared to have placed Agni in the sky as *Sûrya Âditeya*, the Sun, the offspring of Aditi. In x. 80, 4, Agni is said to have many abodes.

The highest divine functions are ascribed to Agni. He is called the divine king, and declared to be strong as Indra (vii. 6, 1). Although (as we have seen above) he is described in some passages as the offspring of heaven and earth, he is said in other places to have stretched them out (iii. 6, 5); to have spread out the two worlds like two skins (vi. 8, 3); to have produced them (i. 96, 4; vii. 5, 6); to have propped up the sky (i. 67, 3; iii. 5, 10; vi. 8, 3); to have measured out the mundane regions and the luminaries of heaven (vi. 7, 7; vi. 8, 2); to have begotten Mitra (x. 8, 4), and caused the sun, the imperishable orb, to ascend the sky (x. 156, 4); to have made all that flies, or walks, or stands, or moves (x. 88, 4).² He is the head (*mûrdhâ*) and summit of the sky, the centre (*nâbhi*) of the earth (i. 59, 2; comp. verse 1; vi. 7, 1; viii. 44, 16; x. 88, 5). His greatness exceeds that of heaven and all the worlds (i. 59, 5; iii. 3, 10; iii. 2, 7; iii. 6, 2).³ He has achieved famous exploits of old (vii. 6, 2). Men tremble at his mighty deeds, and his ordinances cannot be resisted (ii. 8, 3; ii. 9, 1; vi. 7, 5; viii. 44, 25; viii. 92, 3). Earth and heaven obey his command (vii. 5, 4). He gained wealth for the gods in battle (i. 59, 5); and delivered them⁴ from

¹ This triple existence is according to Sâkapânî, as quoted by Yâska Nir. vii. 28), that which Agni has on earth, in the atmosphere, and in heaven. The gods are said in the same hymn (x. 88, 7) to have thrown into Agni, an oblation accompanied by a hymn, and in v. 9, this oblation is said to have consisted of all creatures of all worlds *bhuvanani tîvra*.

² This half verse is quoted in Nirukta, v. 3. Durga, the commentator on the Nirukta, explains the words by saying that Agni subjects all things to himself at the time of the morning sacrifice.

³ Epithets of this description may have been originally applied to some other god to whom they were more suitable than to Agni, and subsequently transferred to him by his worshippers in emulation of the praises lavished on other deities.

⁴ Unless we are to take *devân* here in the sense of priests.

calamity (vii. 13, 2). He is the conqueror of thousands (i. 188, 1). All the gods fear and do homage to him when he abides in darkness (vi. 9, 7). He is celebrated and worshipped by Varuna, Mitra, the Maruts, and all the 3339 gods (iii. 9, 9; iii. 14, 4; x. 69, 9). It is through him that Varuna, Mitra, and Aryaman (i. 141, 9) triumph. He sees all worlds (x. 187, 4). He knows the recesses of heaven (iv. 8, 2, 4), the races of gods and men (i. 70, 2, 6; iii. 4, 11; vi. 15, 13), the secrets of mortals (viii. 39, 6), and all things (i. 188, 1). He is *asura*, the divine (iv. 2, 5; v. 12, 1; v. 15, 1; v. 27, 1; vii. 2, 3; vii. 6, 1; x. 11, 6).

The votaries of Agni prosper (vi. 2, 4, 5; vi. 5, 5; vi. 10, 3; vi. 13, 4; vi. 15, 11; vii. 11, 2; viii. 19, 5, 6; viii. 73, 9). He is the friend of the man who entertains him as a guest (iv. 1, 10), and bestows protection and wealth upon the worshipper who sweats to bring him fuel, or wears his head to serve him. He watches with a thousand eyes over the man who brings him food and oblations (x. 79, 5). He bestows children (v. 25, 5), wealth (i. 1, 3; i. 31, 10, 12; i. 36, 4), and victory (i. 27, 7, 8). No mortal enemy can by any craft lord it over the man who sacrifices to him (viii. 23, 15). He also confers, and is the guardian and lord of, immortality (i. 31, 7; vi. 7, 1; vi. 7, 7; vii. 4, 6). He was made by the gods the centre of immortality (*amṛtasya nābhīḥ*, iii. 17, 4). In a funeral hymn (x. 16, 4) Agni is supplicated to carry the unborn part of the deceased to the world of the righteous. He carries men across calamities or preserves them from them (iii. 20, 4; v. 4, 9; vii. 12, 2). All treasures are congregated in him (x. 6, 6). All blessings proceed from him, as branches from a tree (vi. 13, 1). He is master of all the treasures in the earth, the atmosphere and the sky (vii. 6, 7; x. 91, 3). He is in consequence continually supplicated for various boons (iv. 2, 4 ff.; i. 18, 9; i. 36, 14-16; i. 58, 8, 9; ii. 7, 2, 3; vi. 1, 12 f.), to be an iron wall with a hundred ramparts to protect his worshippers (vi. 18, 8; vii. 3, 7; vii. 15, 14); to consume their enemies (iv. 4, 3 ff.); and to forgive sin (iv. 12, 4; vii. 93, 7), to avert Varuna's wrath (iv. 1, 4, 5), and to release from (his?) bonds (v. 2, 7).

In one place (viii. 44, 23), the worshipper naively says to Agni: "If I were thou, and thou wert I, thy aspirations should be fulfilled;" and again, viii. 19, 25 f.: "If, Agni, thou wert a mortal, and I an immortal, . . . I would not abandon thee to wrong or to penury. *My* worshipper should not be poor, nor distressed, nor miserable." (Compare the similar appeal to Indra's generosity in vii. 32, 18, 19.)

In another place (x. 79, 6) the worshipper asks "why hast thou among (all) the gods forsaken and injured us? I ask thee in my ignorance."

Agni is occasionally identified with other gods and different goddesses, Indra, Vishṇu, Varuṇa, Mitra, Aryaman, Anṣa, Tvasṭṛ, Rudra, Pūshan, Savitr, Bhaga, Aditi, Hotrâ, Bhâratî, Ilâ, Sarasvatî (ii. 1, 3-7, and 11; iii. 5, 4; v. 3, 1; vii. 12, 3; x. 8, 5).¹ All gods are comprehended in him (v. 3, 1); he surrounds them as the circumference of a wheel does the spokes (i. 141, 9; v. 13, 6). Varuṇa is in one place (iv. 1, 2) spoken of as his brother.

Agni is associated with Indra in different hymns, as i. 108 and 109; iii. 12, 1 ff.; vi. 59 and 60; vii. 93 and 94; viii. 38 and 40. The two gods are said to be twin brothers, having the same father, and having their mothers here and there² (vi. 59, 2), to be both thunderers, slayers of Vṛttra, and shakers of cities (iii. 12, 4, 6; vi. 59, 3; vi. 60, 3; vii. 93, 1, 4; viii. 38, 2). They are also invited together to come and drink soma (vii. 93, 6; viii. 38, 4, 7-9), and are together invoked for help (vii. 94, 7). Agni is elsewhere said to exercise alone the function usually assigned to Indra, and to slay Vṛttra and destroy cities (i. 59, 6; i. 78, 4; iii. 20, 4; vi. 16, 14, 39, 48; vii. 5, 3; vii. 6, 2). He is also described as driving away the Dasyus from the house, thus

¹ Another verse where Agni is identified with other gods is of a more pantheistic character, viz., i. 164, 46, "They call him Indra, Mitra, Varuṇa, Agni; then there is that celestial well-winged bird. Sages name variously that which is but one; they call it Agni, Yama, Mâtariṣvan."

² The sense of the word *ihchamûtarâ* is not clear. Sâyaṇa says it means that their mother Aditi is here and there, i.e. everywhere. Roth, s.v., understands it to mean that the mother of the one is here, of the other there, i.e. in different places.

creating a large light for the Ârya (vii. 5, 6),¹ as the promoter of the Ârya (viii. 92, 1), and as the vanquisher of the irreligious Panis (vii. 6, 3),—though it is Indra who is most frequently represented in the hymns as the patron and helper of the sacred race, and the destroyer of their enemies. On the other hand, in viii. 38, 1, where the two gods are called two priests (*ṛtvijā*), Indra is made to share in the character peculiar to Agni. In hymn i. 93, Agni and Soma are celebrated in company.

XI. TVASHṬR.

Tvashṭr, as represented in the Rig Veda, is the Indian Vulcan, the artist *par excellence* (compare Nirukta, viii. 13), the divine artizan, the most skilful of workmen, who is versed in all magical devices (x. 53, 9). He forges the thunderbolts of Indra² (i. 32, 2; i. 52, 7; i. 61, 6; i. 85, 9; v. 31, 4; vi. 17, 10; x. 48, 3), which are described as formed of gold (i. 85, 9), or of iron (x. 48, 3), with a thousand points and a hundred edges (i. 85, 9; vi. 17, 10). He is styled *supāṇi*, *sugabhastī*, the skilful-handed (iii. 54, 12; vi. 49, 9), *svapas*, *akṛt*, the skilful worker (i. 85, 9), *viśvarūpa*,³ the creator of all forms (i. 13, 10; iii. 55, 19; x. 10, 5), and *savitṛ*, the vivifier (iii. 55, 19; x. 10, 5). He is the bestower of generative power and of offspring (i. 142, 10; iii. 4, 9; vii. 2, 9; vii. 34, 20; compare Vājasaneyi Sanhitā, xxi. 20; xxii. 20; xxvii).⁴ He forms husband and wife for each other even from the womb (x. 10, 5; A.V. vi. 78, 3). He transforms the seminal germ in the womb, and is the shaper of all forms human and animal (R.V. i. 188, 9; viii. 91, 8; x. 184, 1; A.V. ii. 26, 1; v. 26, 8; ix. 4, 6; Vājasaneyi Sanhitā, xxxi. 17; Taittirīya Sanhitā, i. 4, 2, 1; Śatapatha Brāhmaṇa, ii. 2, 3, 4; iii. 7, 3, 11; xiii. 1, 8, 7). He has produced and nourishes

¹ In i. 59, 2, the gods are said to have produced him as a light to the Ârya.

² In i. 121, 3, Indra is said to fashion his own thunderbolts.

³ In iii. 38, 1, Indra also is called *viśvarūpa*.

⁴ Quoted in Nirukta, v. 34. See Roth's Illustrations of Nirukta, p. 144.

⁵ In A.V. vi. 81, 3, Tvashṭr is said to have bound the amulet which Aditi wore when she was desirous of offspring, on the arm of a female in order that she might bear a son.

a great variety of creatures; all worlds are his, and are known to him, for he has created them, and has given to the heaven and the earth their forms (iii. 55, 19; iv. 42, 3; x. 110, 9; Vāj. Sanh. xxix. 9). He bestows long life (x. 18, 6; A.V. vi. 78, 3). He puts speed into the feet of a horse (V. S. ix. 9). He created Brhaspati (ii. 23, 17), and is said, along with other deities, Heaven and Earth, the Waters, etc., to have produced Agni (i. 95, 2; x. 2, 7; x. 46, 9). (And yet, in common with other gods, he is said, in x. 125, 2, to be sustained by the goddess Vâch). He is master of the universe (*bhuvanasya sakshaniḥ*, ii. 31, 4), a first-born protector and leader (i. 13, 10; ix. 5, 9). He is called *vibhu*, the pervading, and knows the paths of the gods (x. 70, 9). He is supplicated to nourish the worshipper, and protect his sacrifice. He is *dravinodas*, the giver of wealth (x. 70, 9; x. 92, 11); and is asked, like the other gods, to bestow riches and protection (vii. 34, 22).

Tvashtṛ is in several passages connected with the R̥bhus, who, like him, are celebrated as skilful workmen (see Roth's *Lexicon*, s.v.), who fashioned Indra's chariot and horses, etc. etc. (i. 111, 1; i. 161, 3), and are spoken of by Sâyaṇa (on i. 20, 6) as Tvashtṛ's pupils. These R̥bhus are said to have made into four a single new sacrificial cup which Tvashtṛ had formed (i. 20, 6; i. 110, 3). This exhibition of skill is said to have been performed by command of the gods, and in consequence of a promise that its accomplishment should be rewarded by their exaltation to divine honours (i. 161, 1-5). Tvashtṛ is in this passage represented as resenting this alteration of his own work as a slight to himself, and as having in consequence sought to slay his rivals. In another place (iv. 33, 5, 6), on the contrary, he is said to have applauded their design, and admired the brilliant results of their skill.

In ii. 1, 5, Agni is identified with Tvashtṛ, as he is also, however, with many other gods in other verses of the same hymn. In i. 95, 5, Agni appears to be designated by the word Tvashtṛ. In vi. 47, 19, where Tvashtṛ is spoken of as yoking his horses and shining resplendently, the commentator supposes that Indra is referred to.¹

¹ On the obscure passage, i. 84, 15, where the name of Tvashtṛ is mentioned

In x. 17, 1 f. Tvashṭr is said to have given his daughter Saranyu in marriage to Vivasvat: "Tvashṭr makes a wedding for his daughter. (Hearing) this the whole world assembles. The mother of Yama, the wedded wife of the great Vivasvat, disappeared. 2. They concealed the immortal (bride) from mortals. Making (another) of like appearance (*savarṇām*), they gave her to Vivasvat. Saranyu bore the two Aśvins, and when she had done so, she deserted the two twins." These two verses are quoted in the Nirukta, xii. 10 f., where the following illustrative story is told: "Saranyu, the daughter of Tvashṭr, bore twins to Vivasvat the sun. She then substituted for herself another female of similar appearance (*savarṇām*), and fled in the form of a mare. Vivasvat in like manner assumed the shape of a horse, and followed her. From their intercourse sprang the two Aśvins, while Manu was the offspring of *Savarṇā* (or the female of like appearance)." (See Roth's interpretation of R.V. x. 17, 1 ff. and remarks thereon, in the Journal of the German Oriental Society, iv. 424 f.; and the same writer's translation, in his Illustrations of the Nirukta, p. 161, of a passage of the Bṛhaddevatā, given by Sāyaṇa on R.V. vii. 72, 2, relating the same story about Vivasvat and Saranyu which is given in the Nirukta).

In R.V. viii. 26, 21 f. Vāyu also is spoken of as Tvashṭr's son-in-law. Whether Vāyu's wife was different from Saranyu, or whether there is a discrepancy between this story and the one just referred to about Vivasvat, does not appear.

Tvashṭr is represented as having for his most frequent attendants the wives of the gods (i. 22, 9; ii. 31, 4; ii. 36, 3; vi. 50, 13; vii. 35, 6; x. 64, 10; x. 66, 3).

In x. 49, 10, he is spoken of as if he were a deity of some importance, though inferior to Indra, since the latter is said to perform what even the gods and Tvashṭr could not do.

Indra is occasionally represented as in a state of hostility

Wilson's translation and note, Roth's explanation in his Illustrations of the Nirukta, p. 49, and Benfey's remarks in his "Orient und Occident," ii. 245 f., may be consulted.

with Tvashtṛ and his son.¹ Thus, in iii. 48, 4, it is said that Indra overcame him, and carried off his soma-juice, which he drank from the cups; and in iv. 18, 3, that the same god drank off the soma in his house. In explanation of these allusions, the commentator (who in his note on iii. 48, 4, calls Tvashtṛ an Asura) refers to the Taittirîya Sanhitâ, ii. 4, 12, 1, where it is related that Tvashtṛ, whose son had been slain by Indra, began to perform a soma-sacrifice in the absence of the latter, and refused, on the ground of his homicide, to allow him to assist at the ceremony; when Indra interrupted the celebration, and drank off the soma by force (compare Śatapatha Brâhmaṇa, i. 6, 3, 6 ff; v. 5, 4, 7 ff.; xii. 7, 1, 1; xii. 8, 3, 1 ff).

The son of Tvashtṛ is mentioned in several passages of the Rig Veda. Thus in x. 8, 8, it is said: "This Trita Âptya, knowing his paternal weapons, and impelled by Indra, fought against the three-headed and seven-rayed (monster), and slaying him, he carried off the cows even of the son of Tvashtṛ. 9. Indra, the lord of the good, pierced this arrogant being, who boasted of his great force; seizing the cows, he struck off the three heads even of Viṣvarûpa the son of Tvashtṛ (or of the omniform son of Tvashtṛ)." (Compare ii. 11, 19; x. 76, 3). A loud-shouting monster with three heads and six eyes, perhaps identical with the son of Tvashtṛ, is also mentioned in x. 99, 6, as having been overcome by Indra or Trita.

Viṣvarûpa is frequently mentioned in the later works.

According to the Taittirîya Sanhitâ, ii. 5, 1, 1 ff., he was the priest (*purohita*) of the gods, while he was sister's son (no further genealogy is given) of the Asuras. He had three heads, called respectively the soma-drinker, the wine-drinker, and the food-eater. He declared in public that the sacrifices should be shared by the gods only, while he privately recommended that they should be offered to the Asuras. For, as the author of the Brâhmaṇa remarks, it is customary for people in public to promise every one a share, whereas it is

¹ In i. 80, 4, it is said that even Tvashtṛ trembles at Indra's wrath when he thunders. But this trait is merely introduced to indicate the terrific grandeur of Indra's manifestations. In Vâj. Sanh. xx. 44, Tvashtṛ is said to have imparted vigour to Indra.

only those to whom the promise is privately made who obtain its fulfilment. Indra was alarmed lest his dominion should by this procedure of Viṣvarûpa be overturned, and he accordingly smote off his heads with a thunderbolt. The three heads were turned into birds, the one called Soma-drinker, became a Kapinjala (or Francoline partridge), the Wine-drinker a Kalavinka (or sparrow), and the Food-eater a Tittiri (or partridge), etc.

Compare the Śatapatha Brâhmaṇa, i. 6, 3, 1 ff.; v. 5, 4, 2 ff.; and the Mahâbhârata, Udyoga Parva, 228 ff.

In the Mârkaṇḍeya Purâṇa, section 77, Tvashṭṛ is identified with Viṣvakarman and Prajâpati. Compare verses 1, 10, 15, 16, 34, 36, 38, and 41. Weber (*Omina und Portenta*, p. 391 f.) refers to a passage of the *Adbhutâdhyâya* of the Kauṣika Sûtras, where Tvashṭṛ is identified with Savitr and Prajâpati.

XII. SOMA.

Soma is the god who represents and animates the juice of the soma plant, an intoxicating draught which plays an important part in the sacrifices of the Vedic age. He is, or rather was, the Indian Bacchus. Not only are the whole of the hymns in the ninth book of the Rig Veda, one hundred and fourteen in number, besides a few in other places, dedicated to his honour, but constant references to the juice of the soma occur in a large proportion of the other hymns. It is clear therefore, as remarked by Professor Whitney (*Journ. of the Amer. Orient. Society*, iii. 202), that his worship must at one time have attained a remarkable popularity. This circumstance is thus explained by the writer to whom I have referred: "The simple-minded Arian people, whose whole religion was a worship of the wonderful powers and phenomena of nature, had no sooner perceived that this liquid had power to elevate the spirits, and produce a temporary frenzy, under the influence of which the individual was prompted to, and capable of, deeds beyond his natural powers, than they found in it something divine: it was, to their apprehension, a god, endowing those into whom it

entered with godlike powers; the plant which afforded it became to them the king of plants; the process of preparing it was a holy sacrifice; the instruments used therefor were sacred. The high antiquity of this cultus is attested by the references to it found occurring in the Persian Avesta;¹ it seems, however, to have received a new impulse on Indian territory."

Dr. Haug, in his work on the Aitareya Brâhmaṇa (Introd. p. 60), thus writes of the soma sacrifice: "Being thus," (*i.e.* through the oblation of an animal) "received among the gods, the sacrificer is deemed worthy to enjoy the divine beverage, the soma, and participate in the heavenly king, who is Soma. The drinking of the soma-juice makes him a new man; though a new celestial body had been prepared for him at the Prâvargya ceremony, the enjoyment of the soma beverage transforms him again; for the nectar of the gods flows for the first time in his veins, purifying and sanctifying him."

With the decline of the Vedic worship, however, and the introduction of new deities and new ceremonies, the popularity of Soma gradually decreased, and has long since passed away; and his name is now familiar to those few Brahmans only who still maintain in a few places the early Vedic observances.

The hymns addressed to Soma were intended to be sung while the juice of the plant from which he takes his name (the *asclepias acida* or *sarcostemma viminalis*) was being pressed out and purified.² They describe enthusiastically the flowing forth and filtration of the divine juice, and the effects produced on the worshippers, and supposed to be produced on the gods, by partaking of the beverage. Thus the first verse of the first hymn of the ninth book runs thus: "O soma, poured out for Indra to drink, flow on purely in a most sweet and exhilarating current." In vi. 47, 1, 2, the juice is described

¹ See Dr. Windischmann's Essay on the Soma-worship of the Aryans, or the translated extracts from it in Sanskrit Texts, vol. ii. p. 469 ff., and the extract there given, p. 471, from Plutarque de l'Inde, et Oar. 16, in which the *soma*, or as it is in *Zoroastrian*, appears to be referred to under the appellation *Suava*. See also in the *Act of the ceremony* of the Iranians being externally identical with the *act of the ceremony* of the Zoroastrians, Haug's Aitareya Brâhmaṇa, Introd., p. 62.

² The process is described by Windischmann, after Dr. Stevenson, in Sanskrit Texts, ii. 470.

as sweet, honied, sharp, well-flavoured. When quaffed, it stimulates the voice, and calls forth ardent conceptions (ibid. v. 3). In a verse (viii. 48, 3) already quoted above, in the account of Indra, the worshippers exclaim: "We have drunk the soma, we have become immortal, we have entered into light, we have known the gods. What can an enemy now do to us, or what can the malice of any mortal effect, O thou immortal god?" No one can withstand Indra in battle when he has drunk this libation and become exhilarated by it (vi. 47, 1, 2).

The plant is said to have been brought to the earth by a falcon (iii. 43, 7; iv. 26, 4, 5, 7; iv. 27, 3, 4) from a mountain (i. 93, 6) where it had been planted by Varuṇa (v. 85, 2), or from the uppermost sky (iv. 26, 6). In another place (ix. 113, 3) it is declared to have been brought by the daughter of the Sun from the place where it had been nourished by Parjanya, the rain-god; when the Gandharvas took it, and infused into it sap.

In other passages a Gandharva is connected with the soma plant, the sphere (*pada*) of which he is said to protect, and all the forms of which he is said to manifest (ix. 83, 4; ix. 85, 12).¹ In the Śatapatha Brāhmaṇa (iii. 2, 4, 1, ff.) it is related that the soma existed formerly in the sky. The gods desired to get it, that they might employ it in sacrifice. The Gāyatri flew to bring it for them. While she was carrying it off, the Gandharva Vibhāvasu robbed her of it. The gods became aware of this, and knowing the partiality of the Gandharvas for females (comp. iii. 9, 3, 20), they sent Vāch, the goddess of speech, to induce them to give it up, which she succeeded in doing. And in xi. 7, 2, 8, it is said: "The soma existed in the sky. The Gāyatri became a bird, and brought it." See also the Śatapatha Brāhmaṇa, iii. 6, 2, 2-18, towards the close of which passage, as well as in iii. 9, 3, 18, the Gandharvas are spoken of as the guardians of the soma.

The juice of this plant is said to be an immortal²

¹ See Roth's Lexicon under the word *Gandharva*.

² This means, according to Sāyana, that it has no deadly effects, like other intoxicating drinks.

draught, to be medicine for a sick man (viii. 61, 17). All the gods drink of it (ix. 109, 15). The god also, who is its personification, is said to clothe whatever is naked, and to heal whatever is sick; through him the blind sees, and the lame walks abroad (viii. 68, 2; x. 25, 11). He is the guardian of men's bodies, and occupies their every member (viii. 48, 9).

A great variety of divine attributes and operations are ascribed to Soma. As Prof. Whitney observes, he is "addressed as a god in the highest strains of adulation and veneration; all powers belong to him; all blessings are besought of him, as his to bestow." He is said to be *asura*, divine (ix. 73, 1; ix. 74, 7), and the soul of sacrifice (ix. 2, 10; ix. 6, 8). He is immortal (i. 43, 9), and confers immortality on gods and men (i. 91, 1, 6, 18; viii. 48, 3; ix. 106, 8; ix. 108, 3; ix. 109, 2, 3). In a passage (ix. 113, 7 ff.) where the joys of paradise are more distinctly anticipated and more fervently implored than in most other parts of the Rig Veda, Soma is addressed as the god from whom the gift of future felicity is expected. Thus it is there said: "7. Place me, O purified god, in that everlasting and imperishable world where there is eternal light and glory. O Indu (soma), flow for Indra. 8. Make me immortal in the world where king Vaivasvata (Yama, the son of Vivasvat,) lives, where is the innermost sphere of the sky, where those great waters flow."

Soma exhilarates Varuṇa, Mitra, Indra, Vishṇu, the Maruts, the other gods, Vâyu, Heaven and Earth (ix. 90, 5; ix. 97, 42). By him the Âdityas are strong, and the earth vast (x. 85, 2). He is the friend, helper, and soul of Indra (iv. 28, 1 ff.; ix. 85, 3; x. 25, 9), whose vigour he stimulates (ix. 76, 2), and whom he succours in his conflicts with Vṛttra (ix. 61, 22). He rides in the same chariot with Indra (ix. 87, 9; ix. 103, 5). He has, however, horses of his own, and a team like Vâyu (ix. 88, 3). He ascends his filter in place of a car, and is armed with a thousand-pointed shaft (ix. 83, 5; ix. 86, 40). His weapons which, like a hero, he grasps in his hand (ix. 76, 2), are sharp and terrible (ix. 61, 30), and his bow swift-darting (ix. 90, 3). He is the slayer of Vṛttra

(i. 91, 5; ix. 24, 6; ix. 25, 3; ix. 28, 3; x. 25, 9), and, like Indra, the destroyer of foes, and overthrower of cities (ix. 88, 4). In ix. 5, 9, he appears to receive the epithet of *prajāpati*, or lord of creatures. He is the creator and father of the gods (ix. 42, 4; ix. 86, 10; ix. 87, 2; ix. 109, 4), the generator of prayers, of the sky, of the earth, of Agni, of Sūrya, of Indra, and of Vishnu (ix. 96, 5). He destroys the darkness (ix. 66, 24; i. 91, 22), lights up the gloomy nights (vi. 39, 3), and has created the sun, the great luminary common to all mankind (ix. 61, 16; ix. 97, 41; ix. 107, 7; ix. 110, 3). He stretched out the atmosphere (i. 91, 22), the heavens and the earth (viii. 48, 13). He is the upholder of the sky and the sustainer of the earth (vi. 47, 5; ix. 87, 2; ix. 89, 6; ix. 109, 6).¹ He is the king of gods and men (ix. 97, 24), elevated over all worlds like the divine sun (ix. 54, 3). All creatures are in his hand (ix. 89, 6). His laws are like those of king Varuna (i. 91, 3; ix. 88, 3); and he is prayed to forgive their infraction, and to be gracious as a father to a son (viii. 48, 9; x. 25, 3). He is thousand-eyed² (ix. 60, 1, 2), and beholds all worlds, and destroys the irreligious (ix. 73, 8; x. 25, 6). He is the most vigorous of the fierce, the most heroic of heroes; as a warrior he is always victorious (ix. 66, 16, 17). He acquires by conquest cows, chariots, gold, heaven, water, a thousand things (ix. 78, 4), and all things (viii. 68, 1). He is *viśvavedas*, the possessor of all wealth (i. 91, 2). He is wise (viii. 68, 1), strong, energetic, the author of fertility (i. 91, 2), an unconquerable protector from enemies (i. 91, 21; x. 25, 7), and an upholder of life (x. 25, 4, 6). The friend of a god like him cannot perish (i. 91, 8).

Soma is associated with Agni as an object of adoration in i. 93, 1 ff. In verse 5 of that hymn those two gods are said to have placed the luminaries in the sky. In the same way Soma and Pūshan are conjoined in ii. 40, 1 ff., where various attributes and functions of a magnificent character are ascribed to them. Thus in verse 1 they are said to be the generators

¹ In ix. 98, 9, he is said to have produced the two worlds, the offspring of Manu, in the sacrifices *yajñeshu manasi Indur janishā rodasi*.

² In ix. 60, 2, and ix. 98, 1, Soma is also called *sahasra-bhāṇas*, having a thousand means of affording support.

of wealth, and of heaven and earth, to have been born the guardians of the whole universe, and to have been made by the gods the centre of immortality. The one has made his abode in the sky, and the other on the earth, and in the atmosphere (v. 4). The one has produced all the worlds, and the other moves onward beholding all things (v. 5). In vi. 72, and vii. 104, Soma and Indra are celebrated in company. In the first of these hymns they are said to dispel darkness, to destroy revilers, to bring the sun and the light, to prop up the sky with supports, and to have spread out mother earth. In vii. 104, their vengeance is invoked against Rākshases, Yātudhānas, and other enemies.

Hymn vi. 74, is dedicated to the honour of Soma and Rudra conjointly. The two gods, who are said to be armed with sharp weapons, are there supplicated for blessings to man and beast, for healing remedies, and for deliverance from evil and sin.

In the post-vedic age the name Soma came to be commonly applied to the moon and its regent. Even in the Rig Veda, some traces of this application seem to be discoverable. Thus in x. 85, 3 and 5, there appears to be an allusion to the double sense of the word: "When they crush the plant, he who drinks regards it as soma. Of him whom the priests regard as Soma (the moon?) no one drinks. 5. When they drink thee, O god, thou increasest again. Vāyu is the guardian of Soma: the month is a part (?) of the year." In the Atharva Veda the following half-verse occurs, xi. 6, 7: "May the god Soma free me, he whom they call the moon (*chandramāh*)" And in the Śatapatha Brāhmaṇa, i. 6, 4, 5; xi. 1, 3, 2; xi. 1, 4, 4, we have the words: "This king Soma, who is the moon, is the food of the gods." Similarly in xi., "the moon is soma, the food of the gods." (See also i. 6, 3, 4; and xii. 1, 1, 2). In v. 3, 3, 12, Soma is said to be the king of the Brāhmanas. In the Viṣṇu Purāṇa (book i. chap. 22, p. 153 of Wilson's translation, 4to.) the double character of Soma is indicated in these words: "Soma was appointed monarch of the stars and planets, of Brāhmanas and of plants, of sacrifices and of penance."

ART. VI.—*A Tabular List of Original Works and Translations, published by the late Dutch Government of Ceylon at their Printing Press at Colombo. Compiled by Mr. MAT. P. J. ONDAATJE, of Colombo.*

| | Name and Size of Book. | Name of Author or Translator. | Language in which written or rendered. | Date of Publication. |
|----|--|---|--|----------------------|
| 1 | A Collection of Prayers, 8vo. | Unknown. | Singhalese. | 1737 |
| 2 | Confession of Faith, 8vo. | Do. | Do. | 1738 |
| 3 | Catechism and Prayers, 8vo. | Do. | Tamul. | 1739 |
| 4 | The Four Gospels, 8vo. | Translated by the Rev. W. Conyn, V.D.M., Colombo. | Singhalese. | 1739 |
| 5 | St. Matthew's Gospel, 4to. | Translated by the Rev. A. Cramer, V.D.M., Jaffna. | Tamul. | 1740 |
| 6 | The Heidelberg Catechism, 8vo. | Translated by the Rev. W. Conyn, V.D.M., Colombo. | Singhalese. | 1741 |
| 7 | A Book containing five smaller Catechisms, the Creed, the Decalogue, and Prayers, 8vo. | Unknown. | Do. | — |
| 8 | The Gospels of St. Mark, Luke, and John, 4to. | Translated by a Committee of native scholars, under the superintendence of the Rev. and learned J. P. Witzeles, V.D.M., Colombo, and Rector of the Government Seminary. | Tamul. | 1742 |
| 9 | Confession of the Faith (2d edit.) 8vo. | Translated by the aforesaid Rev. J. P. Witzeles. | Singhalese. | 1742 |
| 10 | A Short Plan of the Doctrine of Faith unto Godliness, 8vo. | Translated by do. | Do. | 1744 |

| | Name and Size of Book. | Name of Author or Translator. | Language in which written or rendered. | Date of Publication. |
|----|--|---|--|----------------------|
| 11 | The Liturgy of the Dutch Reformed Church, 8vo. | Unknown. | Singhalese. | 1744 |
| 12 | Four Sermons, 8vo. | Translated by the Rev. W. Conyn, V.D.M., Colombo. | Do. | 1746 |
| 13 | Sixteen Sermons, 8vo. | Translated by the Rev. P. De Vriest, V.D.M., Colombo. | Tamul. | 1747 |
| 14 | A new edition of Sermons, 8vo. | Translated by the Rev. W. Conyn, V.D.M., Colombo. | Singhalese. | 1753 |
| 15 | A History of the Old Testament. | Unknown. | Tamul. | 1753 |
| 16 | The Triumph of the Truth, or a refutation of the errors of Popery, and an exposition of the doctrines of the Reformed Church, with dedication and preface in Latin, Dutch, and Tamul, 8vo. | Composed by the Rev. and learned Philip De Melho, V.D.M., Colombo.* | Do. | 1753 |
| 17 | Four Sermons on Love and Faith, 8vo. | Unknown. | Singhalese. | 1753 |
| 18 | The Heidelberg Catechism, 8vo. | Translated by the Rev. S. A. Bronsveld, V.D.M., Colombo. | Tamul. | 1754 |
| 19 | A Short Summary of the Christian Religion, 8vo. | By do. | Do. | 1754 |
| 20 | A Metrical Version of the Psalms of David, 8vo. | Translated by the Rev. and learned Philip De Melho, V.D.M., Jaffna. | Do. | 1755 |
| 21 | Borst's Compendium of the Christian Religion, 8vo. | Unknown. | Do. | 1755 |
| 22 | Bert's Short Questions on Religion. | Do. | Do. | — |
| 23 | The Lord's Prayer, the Ten Commandments, the 23rd and 51st Psalms, and the Song of Simeon, 8vo. | Translated in the year 1723, and edited by the Rev. M. Wermelskircher, V.D.M. of the Singhalese congregations at Cotta, Negombo, and Caltura. | Singhalese. | 1755 |
| 24 | Three Sermons, by the Rev. Dr. Wagerdus, Clergyman of Batavia, 8vo. | Edited by the Rev. M. Wermelskircher, V.D.M., Colombo. | Dutch. | 1756 |
| 25 | A Sermon, 8vo. | By the Rev. S. A. Bronsveld, V.D.M., Colombo. | Portuguese. | 1756 |

* For a brief Life of this eminent Divine, Oriental Scholar, and Poet, celebrated as the first Native of Ceylon who was admitted into the Christian Ministry, and the most learned Divine that has appeared in India or that Island, *vide* the "Tamul Plutarch," by Simon Casie Chitty, Esq., author of the "Ceylon Gazetteer," of which a copy was presented by the talented author, since deceased, to the Royal Asiatic Society. Page 69.

| | Name and State of Book. | Name of Author or Translator. | Language in which written or rendered. | Date of Publication. |
|----|---|---|--|----------------------|
| 26 | Rudimenta Linguae Latinae, 8vo. | Composed by the Rev Dr Meyer, V D M., Colombo, and Rector of the Government Seminary | Dutch. | 1756 |
| 27 | The Version of the whole of the New Testament, with an historical preface, 4to. | Translated from the original Greek by the Rev. and learned Philip De Melho, V.D.M. | Tamul. | 1759 |
| 28 | A Dictionary of the Singhalese Language. | Unknown. | Singhalese. | 1759 |
| 29 | The Liturgy of the Dutch Reformed Church, 8vo. | Translated by the Rev and learned Philip De Melho, V.D.M., Jaffna. | Tamul. | 1760 |
| 30 | An Historical and Doctrinal Catechism, 8vo. | Composed by do. | Portuguese | 1760 |
| 31 | The Heidelberg Catechism, 8vo. | Translated by the Rev. W. Conyn (2nd edition). | Singhalese. | 1761 |
| 32 | Catechism for Young Children, 12mo. | By the Rev. S. A. Bronsveld, V D M., Colombo, and Rector of the Government Seminary. | Tamul. | 1766 |
| 33 | Revised Metrical Version of the Psalms of David, and other Sacred Hymns, 8vo. | Edited by do. | Singhalese. | 1768 |
| 34 | Rudimenta Linguae Latinae, 8vo. | By Otto Amytenius, Rector of the Latin School at Overtrieden, edited by Bronsveld | Latin. | 1768 |
| 35 | Jochimi Langii Colloquiorum Centura, 8vo. | Edited by the Rev W J. Ondastje, V D M., Colombo, and Rector of the Government Seminary | Do. | 1770 |
| 36 | The Acts of the Apostles, 4to. | Translated by two Singhalise Interpreters to Government | Singhalese. | 1771 |
| 37 | The Book of Psalms, in Dutch Metre, 12mo. | Edited by the Rev W. J. Ondastje, V D M., Colombo, and Rector of the Government Seminary. | Dutch. | 1773 |
| 38 | The Epistle to the Romans, 4to. | Translated from the original Greek by the Rev. H. Philipsz, V.D.M., Colombo. | Singhalese. | 1772 |
| 39 | The Epistle to the Corinthians, and Galatians, 4to. | Translated from do. by do. | Do. | 1773 |
| 40 | The Epistle to the Ephesians, Philippians, Colossians, and 1 Thessalonians, to Timothy, Titus, Philemon, and to the Hebrews, 4to. | Translated from do. by do. | Do. | 1776 |

| | Name and Size of Book. | Name of Author or Translator. | Language in which written or rendered. | Date of Publication. |
|----|---|---|--|----------------------|
| 41 | The remainder of the New Testament, 4to. | Translated from the original Greek by the Rev. H. Philippsz, V.D.M., Colombo. | Singhalese. | 1776 |
| 42 | De Mohlin and Drillin-court's Meditations and Prayers for the Holy Communion, 4to. | Translated from the Dutch by Mr. John Franciscus, Proponent of Colombo. | Tamul. | 1776 |
| 43 | The Version of the whole of the New Testament, 4to. | Revised and corrected by the Rev Messrs Fyhrande and Philippsz, V.D.M., Colombo. | Singhalese. | 1780 |
| 44 | A Catechism, 8vo. | Translated by the Rev. W. Conyn, V.D.M., Colombo. | Do. | 1780 |
| 45 | Questions and Answers on the Doctrines of Christianity, in four parts, with Prayers, 4to. | Translated by the Rev. H. Philippsz, V.D.M., Colombo. | Do. | 1780 |
| 46 | The Book of Genesis, 4to. | Translated by do. | Do. | 1783 |
| 47 | A Grammar of the Singhalese Language. | Composed by the Rev. H. Philippsz, V.D.M., Colombo. | Do. | 1783 |
| 48 | An Abridged History of Christianity. | Unknown. | Tamul. | 1787 |
| 49 | A Catechism for Young Children, 12mo. | Translated by the Rev. S. A. Bronsveld, and revised by Proponent Mr. M. J. Ondaatje. | Do. | — |
| 50 | The Books of Exodus, Leviticus, Numbers, and Deuteronomy, 4to. | Translated from the original Hebrew by the Rev. H. Philippsz, V.D.M., Colombo. | Singhalese. | 1789 |
| 51 | A Summary of the Doctrine of Faith unto Godliness, 8vo. | Translated from the Dutch by the Rev. Matthew Jurgen Ondaatje, Proponent of Colombo, afterwards Clergyman of Batavia. | Tamul. | 1789 |
| 52 | The Pentateuch, 4to. | Translated from the Hebrew by the Rev. and learned Philip De Melho, V.D.M., Jaffna. | Do. | 1790 |

ART. VII.—*Assyrian and Hebrew Chronology compared, with the view of showing the extent to which the Hebrew chronology of Ussher must be modified, in conformity with the Assyrian Canon.* By I. W. BOSANQUET, Esq.

[Read March 7, 1864.]

It is now about two years since Sir H. Rawlinson published his discovery of the Assyrian Canon, that is to say, of a list of annual functionaries in the kingdom of Assyria, extending over a period of about two hundred and seventy years of the duration of that great empire. This is the most valuable contribution towards the recovery of ancient Asiatic chronology which has been made since the time when Selden deciphered and published the contents of the Parian Chronicle, in the reign of Charles the First; and there is every reason to believe that by means of this document, in conjunction with the well-established dates of the early portion of the Babylonian Canon, we shall be enabled, not only to fix with certainty the dates of the reigns of thirteen kings of Assyria, reaching as early as the year B.C. 907; but also, with much probability, to recover the exact date of the rise of the first Chaldean dynasty in Assyria; or, in other words, the commencement of the era of Ninus and Semiramis. Sufficient time has now elapsed for a full investigation of the contents and bearing of this valuable document, and three eminent Assyrian scholars, viz., Sir H. Rawlinson in England, Dr. Hincks in Ireland, and Monsieur Oppert in Paris, after careful and independent examination, have published their comments upon it. They are as yet undecided as to what was the exact nature of the functions of these annual officers, whether military, civil, or priestly.¹ For the

¹ These officers were probably military, considering the known character of some of them, and that the whole army at Nineveh was annually changed, and new officers appointed. See Diodorus, Rhodom. ii. p. 108.

purpose of reference, however, we may speak of them as archons. It is certain, that like the eponymous archons of Athens, and the consuls of Rome, they had the honour of giving name to the year in all public documents.

It is satisfactory to find, that with regard to one most interesting portion of this Assyrian record, viz., that which is found to range with the first sixty-seven years of the Canon of Ptolemy, or the era of Nabonassar,—that is, from the year B.C. 747 to the year B.C. 680, comprehending the reigns of Tiglathpileser, Sargon, and Sennacherib, which is the period now proposed to be discussed,—there is little difference between the three Assyrian authorities, and that within a year or two at most, they are agreed as to the year of office of each successive archon.

For the most recent views of Sir H. Rawlinson on the Canon we may refer to the *Athenæum* of the 22nd August, 1863. Dr. Hincks first published his comments in the *Athenæum* of July, 1862, and has repeated his observations with great distinctness, and without variation, in the *Athenæum* of the 24th October, 1863; and M. Oppert, in his treatise entitled, "*Les Inscriptions Assyriennes des Sargonides*," bearing date 1862, has adopted nearly the same arrangement as Dr. Hincks, as regards the period under inquiry, though differing from him above that time to the extent of ten or twenty years.

The professed object both of Dr. Hincks and M. Oppert is to show, that the chronology of the Assyrian Canon, as settled by themselves and Sir H. Rawlinson, confirms, and is in strict unison with the commonly received reckoning of the Kings of Judah and Israel, as established on the authority of the great names of Archbishop Ussher, Scaliger, Petavius, Blair, Clinton, and other modern chronologists; while Sir H. Rawlinson, though unable to satisfy himself as to the true mode of adjustment of Assyrian and Hebrew chronology, is of opinion that some modification of the common reckoning is required. The writer of these observations maintains in opposition to the two first, while fully accepting their arrangement of the list of archons, that the Assyrian Canon

presents one continuous series of contradictions to the reckoning of Ussher, throughout the whole period of sixty-seven years under discussion, clearly demonstrating an error in that reckoning of at least twenty-three years in excess; and the object of this paper is to show, that when the events recorded in sacred history in connexion with the three kings Tiglathpileser, Sargon, and Sennacherib, are ranged side by side with the same events recorded in the contemporary Assyrian inscriptions which relate the annals of those reigns, and when the dates of the Canon are attached to the events, the Hebrew chronology which is the result, is not the chronology of Ussher and his followers, but neither more nor less than the chronology of a Hebrew historian, who wrote in the third century before the Christian era,—that is to say, the chronology of Demetrius.

Dr. Hincks has the honour of being the first to point out the exact year of contact between the Assyrian and Babylonian Canons, by which the dates of the reigns of the several Assyrian kings and archons have been determined. In a paper read before the Royal Irish Academy in 1852, ten years before the discovery of the Assyrian Canon, he directed attention to the inscription on a clay cylinder in the British Museum, commonly known as Bellino's cylinder, from which it would appear that the date of Sennacherib's accession to the throne of Nineveh must have been nearly concurrent with the year B.C. 702, that is to say, just twenty-two years before the accession of his son Esarhaddon, or Asaradinus, to the throne of Babylon, in B.C. 680, as set down in Ptolemy's Canon; and from this opinion he has never swerved. It has been already observed, that the mode of marking the date of public documents in Assyria was by affixing the name of the archon who presided in the year of publication. Now Bellino's cylinder is inscribed with the name Neboliha, the archon who stands fourth on the list after "Sennacherib the king;" and as the inscription contains a record of the events of the first four years of Sennacherib's reign, Dr. Hincks rightly placed his accession in the fourth year before Neboliha, whatever the date of that year might

be. Sir Henry Rawlinson also confirms this, and assures us that he has found a clay fragment dated in the seventh year of Sennacherib, bearing the name of the archon who stands seventh on the list after Sennacherib; and again, another fragment dated in the twenty-second year of Sennacherib, bearing the name of the archon Manu-zir-ilin, the twenty-second on the list. So that there can be no question as to the true position of the reign of Sennacherib amongst the list of archons, nor that the length of his reign extended over at least twenty-two years. From the Canon it appears that it lasted twenty-four years.

It now only remains to show how the date of the year of Sennacherib's accession has been determined. Let us follow Mr. Fox Talbot's translation of Bellino's cylinder, published in the *Journal of the Society*, vol. xviii. Part 1, where Sennacherib thus records his own acts: "At the beginning of my reign I destroyed the armies of Merodac-Baladan, king of Karduniash." "The man Belib (or Belib-ni¹) a nobleman of the city of Suanna,² who had been educated like a gallant youth (or, like one of my own children, R.) in my palaco, I set over them, and made him king of Leshnan and Akaddi," that is, of Babylonia. Dr. Hincks, with much acuteness, fixed upon these latter words as affording a clue to the chronology of this king's reign, and it is now agreed on all sides that the Belib, or Belib-ni of the inscription, set on the throne of Babylon by Sennacherib at the beginning of his reign, can be no other than the Belibus of the Babylonian Canon, who began to reign in the year B.C. 702. So that the beginning of Sennacherib's reign must also be placed in that very year.

This is the fundamental date of the whole arrangement of the Assyrian Canon, and it is of extreme importance that the point of time in Sennacherib's reign, when he set Belib-ni on the throne, should be accurately ascertained. Dr. Hincks and M. Oppert place the actual accession of Sennacherib in B.C. 703, and his first regnal year in B.C. 702; and Taylor's cylinder, written sixteen years later than Bellino's, counten-

¹ Belib-ni. Oppert and Rawlinson.

² Babylon. R.

ances this arrangement, by putting together the events of the beginning of the reign with those of the first year. So that, according to the later record, Belib-ni might have been placed on the throne in the course of the year after the king's accession. The accuracy, however, of the contemporary record, rather than the looseness of the later document, is to be preferred. We therefore adhere to the year B.C. 702, in preference to the year B.C. 703, as the beginning of Sennacherib's reign. Sir Henry Rawlinson places the accession of Sennacherib in B.C. 704. But the authority of neither cylinder countenances so early a date. It is remarkable, that while copy No. 2 of the Canon places the accession of Sennacherib in the archonship of Pakharra-bil, in the fourth year before Neboliha, copy No. 4 places the accession in the archonship of Nebo-daini-pal, in the third year before Neboliha. The one would appear, with Bellino's cylinder, to separate the year of accession from the first year; the other, with Taylor's cylinder, to blend the year of accession and first year together.

But if the date of one single king or archon in the list is thus securely ascertained, the dates of all the preceding and succeeding archons, during the whole 270 years, are of course ascertained with the same precision. Thus it appears that Sargon, the father of Sennacherib, came to the throne in the year B.C. 716, as certified by the third copy of the Canon, in which year he is there first styled "king." It is of great importance that the years of Sargon also should be accurately fixed, considering that in his second year he took the city of Samaria, carrying away 27,280 captives, and that Jewish history thus comes in contact with Assyrian in that year of his reign. Now the three Assyrian authorities, who are strongly biassed in favour of the common reckoning of Ussher, which places the final capture of Samaria in B.C. 721, are all disposed to place the accession of Sargon five years earlier than B.C. 716, and before his name appears in the Canon, notwithstanding the evidence of the third copy of the Canon to the contrary; and it is assumed by them that the twelve years' reign of Merodac-baladan, or Mardocempadus

of Ptolemy's Canon, which began in B.C. 721,¹ were commensurate with the twelve first years of Sargon. This idea is supposed to be supported by a passage in Sargon's annals,² where in that king's twelfth year he captures Merodac-baladan the son of Yakin, and destroys his capital in Chaldea, speaking of him as having disturbed Babylonia during a period of twelve years. But according to M. Oppert's translation,³ Merodac-baladan is styled in this passage king of Chaldea, not king of Babylon, and his army appears to have advanced from Chaldea. There is no reason, therefore, for supposing the twelve years here spoken of to be any other than the twelve first years of Sargon's own reign. Should it even be admitted that the twelve years' reign of Merodac-baladan, as king of Babylon, are here referred to, which is contrary to the tenour of the passage, still the words would not necessarily imply more than a reference to his former occupation of Babylon as an intruder for that term. But it is quite unnecessary to dwell upon questionable evidence of this nature, whereby to fix the years of the reign of Sargon, resting upon nice inflexions and construction of the Assyrian language, because there can be no question as to the archon under whose presidency the reign of Sargon commenced. M. Oppert informs us that there is in the Louvre⁴ a document dated in the twelfth year of Sargon, which is inscribed with the name Manu-ki-Asshur-liha, who was archon in B.C. 700, according to our table. So that if Sargon's twelfth year was B.C. 700, we may without fear of error place the "beginning" of his reign in the year B.C. 717, during the archonship of Amhur-tirrat-danin, and the end of his first year in B.C. 710. In fact, M. Oppert himself writes: "The true reign of Sargon evidently dates from his fourth year, that is, from the year when he was eponyme," or archon.⁵ The capture

¹ Corroborated by three eclipses in the first and second year.

² Oppert's *Monum. Assyri. des Sargonides*, p. 28.

³ "Merodach Baladan, fils de Jakin, roi de Chaldée" "avait excité contre moi toutes les tribus nomades. Il se prépara à une bataille, et se porta en avant. Pendant 12 ans, contre la volonté des dieux de Babylone, la ville de Bel qui juge les dieux, il avait excité le pays des Sumirs et des Accads et leur avait servi de chef."

⁴ *Monum. Assyri. des Sargonides*, p. 2.

⁵ *Ibid.* p. 20.

of Merodac-baladan, son of Yakin, therefore, must be placed in the year of the archonship of Manu-ki-Asshur-liha.

But if so, since the language of the inscriptions seems to imply that Sargon reigned more than fifteen years,¹ and his fifteenth year, B.C. 702, would thus be commensurate with the first of Sennacherib, the later years of his reign must have coincided with the early years of the reign of Sennacherib; so that Sennacherib's first year, B.C. 702, must be looked upon as merely in association with his father. This inference seems to be favoured by a passage in Abydenus, who, speaking of Sennacherib, observes that he "was scarcely to be recognized amongst the kings,"² which well accords with the idea of quasi sovereignty during his father's life. It is also supported apparently by copy No. 1 of the Canon, which does not even give the name of Sennacherib as archon till eighteen years after his nominal accession; while copies No. 2, and 4, give his name, in B.C. 702, in conjunction with another archon, an arrangement which occurs in connexion with no other king than Sennacherib; and copy No. 3 seems to name him as king under the title Asshur-acherib, not till the year A.C. 684. This suggestion, that Sennacherib ascended the throne of Assyria during the lifetime of his father, will prove to be of some importance when we come to the consideration of the reign of Shalmanezar, and we shall then again have occasion to recur to it. For the present, having fixed the accession of Sargon to the year B.C. 717, we proceed to ascertain the date of the reign of his predecessor, Tiglath-pileser. Copy No. 4 of the Canon places the beginning of the reign of Tiglathpileser in the year following the archonship of Nebo-bil-uzur, that is to say, in the year B.C. 741. Copy No. 1, on the same principle which seems to regulate the years of Sargon and Sennacherib in that copy, includes the year of accession, and places the line which marks the change of reign one year earlier, and Sir Henry Rawlinson accordingly places the broken year of accession of Tiglath-pileser in the archonship of Nebo-bil-uzur, or B.C. 742,

¹ Sargon invaded Cyprus, as proved by his statue found at Idalion; but this invasion is not mentioned in his annals, extending over fifteen years.

² Euseb. *Ann.* p. 26.

according to our reckoning; and there can be no doubt that he is correct. Thus, by means of the astronomical Canon of Ptolemy, and with the same degree of certainty that attaches to the earlier dates of that Canon, we have fixed the dates of the three reigns:

| | |
|--------------------------|-------------|
| Tiglathpileser | B.C. 742-1. |
| Sargon | 717-16. |
| Sennacherib | 702-1. |

In ascending above the year B.C. 742, and searching for the reign of the predecessor of Tiglathpileser, we come upon a subject of great difficulty; for at this point the Hebrew Scriptures and the Assyrian Canon are apparently in contradiction one with the other. As this is a point beyond the strict range of our inquiry, which is limited to the reigns of Sennacherib and his two predecessors, we are not called upon to enter very fully into the question. Nevertheless, since the chronological arrangement of Dr. Hincks and M. Oppert is connected with it, we will not pass it by without some observation. From the Hebrew Scriptures (2 Kings xv. 19) we learn distinctly that Pul was "king of Assyria," when Menahem, king of Samaria, gave him a thousand talents of silver to confirm him on the throne. From the same source also (1 Chron. v. 26) we learn that Pul was the immediate predecessor of Tiglathpileser, king of Assyria. The history of Berosus also speaks of an Assyrian dynasty of kings which lasted till the time of Phul. We cannot, therefore, reasonably doubt that a king bearing that title reigned over the Assyrians, either seated on the throne of Nineveh, or acknowledged there as supreme lord over Assyria. On the other hand, the evidence of the Assyrian Canon is equally distinct in naming Asshur-zallus, or some name widely differing from Pul, as the immediate predecessor of Tiglathpileser; and three Assyrian scribes, in three independent copies of the Canon, have each appended the title "king" to his name. There is no room, therefore, for doubt that king Asshur-zallus, or whatever may have been his real name, was the actual predecessor of Tiglathpileser on the throne of Nineveh. How, then, are we to account for the

Extract from Rawlinson's Assyrian Canon.

ARCHONS AT NINEVEH.

| B.C. | CANON No. 1. | CANON No. 2. | CANON No. 3. | CANON No. 4. |
|------|-----------------------------|-------------------------------|-----------------------------|---------------------------------------|
| 750 | Asshur-zallus (?), the king | — | Asshur-zallus (?), the king | Asshur-zallus (?) the king of Assyria |
| 9 | Samsi-el | — | Samsi-el | Samsi-el |
| 8 | Merodach-sallim-anni | — | Merodach-sallim-anni | Merodach-sallim-anni |
| 7 | Bil-ribu-el | — | Bil-ribu-el | Bil-ribu-el |
| 6 | Shamas-idallik-kul (?) | — | Shamas-idallik-kul (?) | Shamas-idallik-kul (?) |
| 5 | Yam-bil-ikin | Yam-bil-ikin | Yam-bil-ikin | Asshur-bil-ikin |
| 4 | Sin-sallim-anni | Sin-sallim-ani | Sin-sallim-ani | Sin-sallim-anni |
| 3 | Nergal-nazir | Nergal-nazir | Nergal-nazir | Nergal-nazir |
| 2 | Nebo-bil-usur | Nebo-bil-usur | Nebo-bil-usur | Nebo-bil-usur |
| 1 | Bil-ribu-el | Bil-ribu-el | Bil-ribu-el | Tukulti-pali-thirra, king of Assyria |
| 740 | Tukulti-pali-thirra | Tukulti-pali-thirra, the king | — | — |
| 9 | Nebo-danin-anni | Nebo-danin-anni | — | — |
| 8 | Bilu-kas (?) bil-usur | Bil-sukas (?) bil-usur | — | — |
| 7 | Nebo-karir-anni | Nebo-karir-anni | — | — |
| 6 | Sin-taggil | Sin-taggil | — | — |
| 5 | Yam-bil-ikin | Yam-ikin | — | — |
| 4 | Bil-limmi-anni | Bil-limmi-ani | — | — |
| 3 | Bar-Anunit | Bar-Anunit | — | — |
| 2 | Asshur-sallim-anni | Asshur-sallim-anni | — | — |
| 1 | Bil-ribu-el | Bil-ribu-el | — | — |
| 730 | Asshur-danin-anni | Asshur-danin-ani | — | — |
| 9 | Nebo-bil-usur | Nebo-bil-usur | — | — |
| 8 | Nergal-vapallit | Nergal-vapallit | — | — |
| 7 | Bil-lu-dari | — | — | — |
| 6 | Napkhar-el | — | — | — |
| 5 | Idur-Asshur | — | — | — |
| 4 | Bilu-kas (?) bil-usur | — | — | — |
| 3 | Merodach-bil-usur | — | — | — |
| 2 | Tiskaru (?) | — | — | — |
| 1 | Asshur-khalli | — | — | — |
| 720 | Asshur (lost) | — | — | — |
| 9 | Bar-Anunit | — | Bar-Anunit | — |
| 8 | Nebo-edis (?) | — | Nebo-edis (?) | — |
| 7 | Asshur-tirrat (?) danin | — | Asshur-tirrat (?) danin | — |

absence of the name of "Pul king of Assyria," from the list of Assyrian kings in the Canon? The difficulty is more apparent than real. For Berosus, when naming Pul, speaks of him, not as one of the Assyrian line of kings, but very plainly as a king of the Chaldeans, who having gained possession of the empire, put an end to a dynasty of Assyrian kings which had lasted for 526 years. Asshur-zallus, therefore, king of Nineveh, who reigned till the year B.C. 743, according to the Canon, and whose successor on the throne of Nineveh was Tiglathpileser, must have reigned contemporaneously with "*Pul king of Assyria*." The obvious inference from these facts is, that the kingdom of Nineveh, during the reign of Asshur-zallus, and probably also of his predecessor, had fallen for a time under the yoke of the Chaldeans, a nation then rising into great power, and whose seat of government was at Beth-Yakina, towards the head of the Persian Gulph. Pul, the Chaldean king, must have been the predecessor of the great king Merodac-baladan, son of Yakin, who according to the inscriptions contended with Tiglathpileser and his successors during forty years, and the seat of his throne must have been, not at Nineveh, but at Beth-Yakina; while Asshur-zallus and his predecessor we may presume were suffered to remain as tributary kings at Nineveh, paying homage to the Chaldean king. This state of subjection of Assyria to the Chaldeans, we may infer lasted till the strong hand of Tiglathpileser, a king who was not born to the title but usurped it, seized the throne of Nineveh, under whom and his successors the Chaldeans were driven from Assyria, and from Babylon, and at one time even from Chaldea itself, taking refuge in the Persian Gulph. Such appears to be the simple explanation of a difficulty, which has led Dr. Hincks and M. Oppert to suggest, that the names of not less than thirty or forty archons at Nineveh have been omitted from the Assyrian Canon, between the reigns of Asshur-zallus and Tiglathpileser, in order to make room for the supposed reign of Pul.

There is no record left of the actual length of the reign of Pul, nor of the exact time when he first assumed the title of

“king of Assyria.” Could we ascertain this date, we should be enabled, through Berosus, to count up to the date of Ninus and Semiramis at Babylon.

For Berosus reckons that the first 49 Chaldean kings reigned 458 yrs.

| | | | | |
|-------------|---|---|------------------|---|
| 9 Arabian | „ | „ | 145 ¹ | „ |
| 45 Assyrian | „ | „ | 526 | „ |

Now, if we might rely upon an assertion made more than once by M. Oppert in his printed works,² that a document exists in the British Museum, proving that Tiglathpileser began to reign in the twentieth year of his predecessor,—that is, in the twentieth year of Pul’s invasion,—the inference would be that Pul’s invasion of Assyria took place about the year B.C. 760, and that the dynasty of Assyrian kings, which commenced 526 years before his time, came to the throne in the year B.C. 1286.

And if we add to this date 145 yrs. for an Arabian dynasty,
and 458 „ „ Chaldean „

we arrive at the year B.C. 1889 as the era of the first Chaldean dynasty at Babylon, or era of Ninus.

This result, being founded on conjecture, as regards the length of the reign of Pul, of course affords no positive evidence that the year B.C. 1889 was the true date of the era of Ninus. Nevertheless, it agrees so remarkably with what Assyrian historians have recorded concerning the epoch of Ninus, that we can hardly doubt the correctness of the conclusion. Abydenus, Castor, and Ctesias, all point to this very date as marking the commencement of the kingdom of Ninus and Semiramis. Eusebius, who had before him the histories of Castor and Abydenus, tells us that they were agreed, and that they had each copied the complete list of the kings of Assyria, from Ninus and Semiramis down to Sardanapalus, who is declared to be the last of the Assyrian kings; and that they computed 167 years from Sardanapalus

¹ The figure in the text is 245. But if Castor has correctly preserved the interval of 1280 from Ninus to the end of the reign of Sardanapalus, there would appear to be exactly 100 years in excess in copying the figures from Berosus.

² *Chronologie des Assyriens et des Babylonians*, p. 7. *Les Inscriptions Assyriennes des Sargonides*, p. 12.

(that is, from the end of his reign) to the first Olympiad.¹ So that, according to these authorities, Sardanapalus ceased to reign in the year B.C. 609, or 608, in which latter year accordingly Eusebius himself places the fall of Nineveh.² He then quotes a passage from Castor, showing that from the accession of Ninus to the accession of another king bearing the same title, who reigned after Sardanapalus, the last of the Assyrian kings, was a period of 1280 years. If then we add 1280 years to the year B.C. 609, we find that the era of Ninus, according to Abydenus and Castor, was B.C. 1889.

Again, Ctesias has preserved the very same date, reckoning upwards from the final destruction of Nineveh by the Medes and Babylonians, when the Assyrian king set fire to his palace in despair; incorrectly, however, supposing the Assyrian king to have been Sardanapalus, instead of his successor Saracus. For the empire of the Assyrians truly ended in the reign of Sardanapalus, the last of the dynasty (omnium postremus) in B.C. 609, who must have been the king who called in the assistance of the Scythians in B.C. 610, to save Nineveh from capture by the Medes. From that time, however, as Herodotus informs us, Assyria fell under the dominion of the Scythians for a period of twenty-eight years, that is, till the year B.C. 583. At the expiration of those twenty-eight years, soon after the great solar eclipse of B.C. 585—the date which governs the chronology of the period—Nineveh was finally destroyed by Cyaxares, king of Media, or as Ctesias and the Assyrian historians affirm, by the combined forces of the Medes and Babylonians. This, then, undoubtedly is the period referred to in the history from which Ctesias took his information, when the palace at Nineveh was burnt, and the last of the Assyrian kings, Saracus, not Sardanapalus, perished in the flames. Now

¹ "Dante singula a Nino et Semiramide recenset, usque ad Sardanapallum, qui fuit ultimus postremus: a qua usque et primam Olympiadem efficitur ante anni LXXVII. I. p. c. lxxvii. Abydenus itaque de regno Assyriorum scriptum ita scripsit. At non ipse solum, sed etiam Castor in primo Chroniconum brev. volumine, ad hunc exempli formam syllabatam quidem de Assyriorum regno narrat.—Euseb. Anch. p. 39.

² Ibid. p. 109.

Ctesias reckons 1306 years, from the time when the Medes and Babylonians destroyed Nineveh to the reign of Ninus the first king, which number of years added to the year B.C. 583, brings us again exactly to the same year, B.C. 1889, for the era of Ninus and Semiramis.¹

The adjustment of the Assyrian and Babylonian Canons thus seems to lead with accuracy to the recovery of a very

¹ Professor Rawlinson, in his 2d vol. of "Ancient Monarchies," published on the day that this paper was read, writes p. 288, "Berosus placed the destruction of Nineveh in the first year of Nabopolassar, or B.C. 625, according to the Canon of Ptolemy," and too boldly asserts that "the direct authority for this important fact is Abydenus." Now, if faith is to be placed in Herodotus, the destruction of Nineveh took place at the end of a period of twenty-eight years, which period both began and ended in the reign of Cyaxares, king of Media. If, then, these twenty-eight years ended in B.C. 625, they must have begun in B.C. 652. But will Mr. Rawlinson venture to affirm that Cyaxares was on the throne of Media so early as B.C. 652? Cyaxares reigned forty years, and was alive at the time of the eclipse of B.C. 585, so that he could not have come to the throne earlier than B.C. 626, nor could the arrival of the Scythians have taken place till after that date. Again, this is not the reckoning of Abydenus. On the contrary, we have already seen from a passage, not referred to by Mr. Rawlinson, that Abydenus placed the fall of Sardanapalus in the year B.C. 609; and in the passage to which the learned Professor does refer, Abydenus distinctly records that the destruction of Nineveh was at the end of the reign of Saracus, who reigned after Sardanapalus, the last Assyrian king. Moreover, he very plainly fixes the time of the overthrow of the city to the time when Nabuchodrossorus, son of Busallossor, that is, Nebuchadnezzar son of Nabopalassar, took the throne of Babylon, and surrounded that city with a strong wall. Clearly, therefore, the destruction of Nineveh as placed by Abydenus, copying from Berosus, was at the end, not at the beginning of the reign of Nabopolassar. This king undoubtedly began to reign in the year B.C. 625, and as certainly his son Nebuchadnezzar came to the throne of Babylon immediately after his death. But there is no such certainty as to the time of his death. The common idea is that he died twenty-one years after B.C. 625. But Polyhistor, who also took his history of Assyria from Berosus, tells us plainly that Sardanapalus was the father of Nebuchadnezzar,* that is, that Nabopalassar and Sardanapalus were one—that it was he who combined with the Medes to overthrow Nineveh—and that on the fall of Saracus he took the throne of Babylon, that is to say, in his old age, long after his ejection from the throne of Nineveh. With this also Cletarchus, the contemporary of Berosus, agrees, who says that Sardanapalus lived to a great age, after having lost the empire of Syria, that is, of Assyria. All this well accords with the testimony of Abydenus, who, though he does not give the actual length of the reign of Saracus, declares that Nineveh fell the full length of that reign after the year B.C. 609, thus leading us into the following century for the date of the event. When, therefore, Herodotus, as we have seen, actually fixes the time of the overthrow of Nineveh soon after the eclipse of B.C. 585; and when Demetrius, who wrote not long after Berosus, places the first year of Nebuchadnezzar—which followed immediately after the fall of Nineveh—in the year B.C. 582, the concurrence of historical testimony seems to place the destruction of Nineveh, not in the year B.C. 625, as the learned Professor suggests, but at the end of the twenty-eight years of Scythian domination, in B.C. 583. All which has been more fully set forth by the writer in Part iii., vol. ii. of the Transactions of the Chronological Institute.

* Euseb. Auch. p. 22.

remote and interesting epoch in ancient history, which has been the subject of much difference of opinion, ancient and modern. And thus the histories of Castor, Abydenus, and Ctesias, hitherto supposed to be in a state of irreconcilable contradiction, appear to be brought into harmony, both with each other, and with the Canon.

This in itself is an interesting result, springing incidentally out of the subject under examination, and is worthy of further investigation. It is not, however, the matter now in hand. We proceed, therefore, to point out a still more interesting, and in its results more important, inference to be derived from this invaluable record, viz., that the common reckoning of Hebrew chronology as arranged by Archbishop Ussher and his followers is, as regards the connexion of Assyria with the Holy Land, in error to the extent of twenty-three years; and that the reckoning of the Jew Demetrius of the third century *a.c.*, which is in unison with the Canon in every particular, must be substituted in its place.

Let us return to the reign of Sennacherib, whose accession we have already fixed to the year *b.c.* 702. Following Mr. Fox Talbot's translation of Bellino's cylinder, we now read, that in the next year, *b.c.* 701, tribute was received by Sennacherib from Nebo the chief of Ararat, and the inhabitants of Kishmi were destroyed. In the following year, *b.c.* 700, Beth-kilamzakh and the land of Illipi was attacked, and tribute paid by the distant Medes.¹ Thus far all is clear and free from difficulty. But at this point arises a question of much importance, and one upon which the accurate adjustment of Scripture with the Assyrian Canon depends. The fourth year from the accession of Sennacherib, *b.c.* 699, is the year of the archonship of Neboliha, and Bellino's cylinder is dated in the seventh month of that year. No warlike events are recorded as having taken place during those seven months, but on the contrary the record on the cylinder is confined to a description of the peaceful operation of building a magnificent palace by the hands of the prisoners of war, under the direction of king Sennacherib himself, who being thus engaged

¹ Journ. R. Asiatic Society, vol. xviii., part 1, p. 79.

during the first half of the year could not have conducted a distant campaign in the same year, involving the capture of more than forty walled cities, which was the result of Sennacherib's third campaign, as we learn from more than one inscription. For this third campaign appears to have comprised that famous expedition into Syria, Palestine, and Egypt, when, according to the inscriptions, Ilulæus, king of Sidon, was deposed; when Hezekiah, king of Judah, was shut up in Jerusalem, and forty-six of his fenced cities taken, and when a tribute of thirty talents of gold and eight hundred talents of silver was laid upon him; and when also, as we learn from Scripture, Tirhakah, king of Ethiopia, came out against Sennacherib in battle. It is quite clear, therefore, that Sennacherib's third campaign could not have taken place till after the fourth year of his reign, that is to say, till after the archonship of Neboliha. Nevertheless, Dr. Hincks and M. Oppert are constrained by their arrangement to place the campaign in this very year. Sir H. Rawlinson sees and avoids the difficulty, by raising the first year of Sennacherib to B.C. 704, and by placing the third campaign in the year after the archonship of Neboliha, that is in the fifth year of Sennacherib, or B.C. 700 according to his reckoning. All three authorities in coming to this result are mainly influenced by the supposed identification of Asshur-nadin, the eldest son of Sennacherib, who, in his fourth campaign, was set on the throne of Babylon by his father, with the Apronadius or Assaranadius of the Canon of Ptolemy, who came to the throne in B.C. 699. So that, if the fourth campaign is thus fixed to the year B.C. 699, the third must necessarily have taken place in the preceding year, B.C. 700. This argument is no doubt specious, and if not contradicted by facts, would be of some weight. Nevertheless, the inference derived from it is so entirely inconsistent with what is derived from other authentic records, that it is quite inadmissible. For, in the first place, while the identity of Apronadius¹ and Asshur-nadin, son of Sennacherib, is questionable, it is quite

¹ Apronadius was probably the brother of Sennacherib, reinstated on the fall of Belibus. The third year spoken of by Polyhistor is the third of Sennacherib, not the third of Belibus.

certain that Asshur-nadin and Asordanius of Polyhistor are one and the same king; and Polyhistor, as we shall presently see, places Asordanius on the throne, not in B.C. 699, but 689. And again, if Sennacherib's invasion of Judæa is placed in B.C. 700, neither the Tyrian annals of Menander, as we shall show, nor the record of the Hebrew Scriptures, can be reconciled with that date.¹

In this difficulty we are fortunately enabled to resort for a solution to another valuable document, also now in the British Museum, which throws quite a different light on the question. Let us consult the record on the famous cylinder known as Taylor's cylinder, which recounts the particulars of eight campaigns conducted by Sennacherib, from the time of his accession down to the archonship of Billimiani, with whose name the cylinder is inscribed.

Now Billimiani presided as archon both in the fifteenth and twentieth years of the reign of Sennacherib, and the authorities are at issue as to which of these years should mark the date of the cylinder. Sir H. Rawlinson places the inscription in the former of these two years, B.C. 688; M. Oppert and Dr. Hincks in the latter, B.C. 684, according to their reckoning, 683 in our table. That this second arrangement is the true one is sufficiently manifest from the fact that Sennacherib's three last campaigns, that is his sixth, seventh, and eighth, during the sixth and eighth of which Susub is recorded to have been on the throne of Babylon, viz., in 686, 685, 684, thus fall in with three years of interregnum, or of disturbed and disputed succession at Babylon, left blank in the Canon of Ptolemy. Whereas if these three campaigns are placed, with Sir Henry, in the years 691, 690, and 689, the years of the reign of Susub² at Babylon fall at a time

¹ Professor Rawlinson observes—"The Hebrew and Assyrian numbers are here irreconcilable. I would propose to read in 2 Kings xvm. 13, twenty-seventh for fourteenth." And again, in addition to this supposed invasion in the twenty-seventh year, suggests that Sennacherib invaded Judæa a second time in the twenty-ninth year of Hezekiah. All which is directly opposed to Jewish history, which leads us to suppose that the last years of Hezekiah were years of peace.—*Anc. Mon.* vol. ii. p. 434 and 439.

² There is a tablet in the British Museum dated in the reign of Susub.—*Rawlinson's Anc. Mon.* vol. ii. p. 452.

when the throne of Babylon was otherwise occupied, that is to say when it was held apparently in undisturbed possession by Mesessimordac of the Babylonian Canon. This latter arrangement therefore is quite inadmissible. And thus we arrive at the remarkable inference that while the second campaign of Sennacherib took place as early as the year B.C. 700, according to our reckoning, his sixth campaign did not take place till the year B.C. 686, leaving an interval between them of thirteen years; and also that during ten years of this interval Sennacherib's power was apparently in abeyance, and his reign without annals. The important question for consideration therefore is, did his third, fourth, and fifth campaigns occupy the first three years of this interval, following soon after the second campaign, as assumed by the three Assyrian authorities, or did they occupy the last three years immediately preceding the sixth campaign, as we now propose to prove? In other words, did the third campaign against Syria, Palestine, and Egypt, take place about the year B.C. 700, or as we determine, after an apparent interregnum of ten years, in B.C. 689? The collateral evidence in favour of the latter of these two dates is so clear and distinct that it seems to be impossible to set it aside.

I. Polyhistor, who places the first year of Nebuchadnezzar in the year B.C. 604, counts 88 years upwards from that date to the beginning of the reign of Sennacherib, showing that he placed the beginning of that reign in B.C. 692,¹ and the third year, therefore, in B.C. 689. The computation we believe to be erroneous, but the date of the reign of Sennacherib is nevertheless distinct.

II. Demetrius, whose reckoning we shall show agrees in all respects with the Canon, writing about fifty years after Berossus, and who had no doubt seen that author's work, places the invasion of Judæa by Sennacherib 457 years before the reign of the fourth Ptolemy, that is, in B.C. 689-8.

III. The year B.C. 689 was a sabbatical year with the

¹ Sir Cornewall Lewis writes, *Astronomy of the Ancients*, p. 430, "Assuming the capture of Babylon by Cyrus to be fixed at B.C. 538, the chronology of Berossus would place the accession of Sennacherib at B.C. 693."

Jews, counted in regular series from three sabbatical years, the dates of which are fixed by Josephus;¹ and in the year in which Sennacherib invaded Judæa we read these words of encouragement spoken to the Jewish king and people—"This shall be a sign unto you," (that Sennacherib shall not besiege Jerusalem) "ye shall eat this year that which groweth of itself" (that is, in the open field); the very words made use of with reference to the sabbatical year at the time of its institution. So that the invasion of Judæa would appear to have taken place in a sabbatical year, which B.C. 689 was. The year B.C. 700, however, falls in the midst of a week of years, and was not sabbatical.²

Lastly, the testimony of the inscriptions, in conjunction with the Tyrian annals of Menander, preserved by Josephus, is decisive on the question. For, the first event recorded in the third campaign of Sennacherib is the deposition of Luliah king of Sidon, and the setting up of Tubaal in his stead; and in an inscription copied by Mr. Layard, and referred to by Dr. Hincks, Luliah is said to have fled from Tyre to Cyprus. All are agreed, therefore, in recognizing in this king the Ilulæus king of Tyre spoken of by Menander; and Menander certifies that he reigned thirty-six years.³ Now, according to the reckoning which places Sennacherib's third campaign in B.C. 700, there is found to be no vacancy on the throne of Tyre for a continuous reign of thirty-six years about the time of Sennacherib; while according to our reckoning, the thirty-six years reign of this great king of Tyre are accounted for with exactness. For, if we reckon thirty-six years upwards from the year B.C. 700, we come to the year 736 for the first year of Ilulrus, when we have the evidence of Assyrian inscriptions⁴ to prove that Hiram, not Ilulrus, was on the throne of Tyre, and that after Hiram reigned Mit-enna, who was still on the throne

¹ See the writer's treatise on Hebrew chronology in Part iv. vol. ii. of the Transactions of the Chronological Institute.

² Dr. H. Rawlinson, who admits the force of this argument, assumes that there was a second invasion by Sennacherib in the year B.C. 689, in the last year of Hezekiah.

³ Josephus, Ant. IX. xiv. 2.

⁴ Athenæum, August 22, 1879.

about the twelfth year of the reign of Tiglathpileser, B.C. 730, according to the Canon. So that the Tyrian annals cannot under this arrangement be reconciled with the Assyrian inscriptions. On this ground accordingly the historical character of Menander's invaluable record has been, rashly as we think, called in question both by Sir Henry, and Professor Rawlinson.¹ On the other hand, if we count thirty-six years upwards from B.C. 689, we come to the year B.C. 725, in which year Mit-enna may have ceased to reign; and on turning to the Canon of Ptolemy we find that a king bearing this same title, Iluleus, began to reign at Babylon in the year B.C. 726-5. The coincidence of date and name is so exact, that we cannot but infer that Iluleus of Tyre, and Iluleus of Babylon were one and the same king.² But if so, it is clear that as Iluleus came to the throne in B.C. 726-5, and reigned thirty-six full years, he did not cease to reign till the year B.C. 689, which must therefore have been the year of Sennacherib's third campaign.

This identification of the Babylonian Iluleus with the king of Tyre, opens an interesting subject of inquiry concerning the political and commercial relations between Tyre and Babylon, and the dependence of the one city upon the other for its prosperity, about the time of which we are speaking; a subject worthy of a few words of digression.

The Phœnicians, as Herodotus informs us,³ came originally from the Erythrean sea, or Persian Gulph; and we learn from Justin that they first established themselves upon the Assyrian lake,⁴ that is, a lake in connexion with the river Euphrates, west of Babylon,—a position convenient for conducting the carrying trade from the Gulph through Babylonia,—and from thence, in course of time, they made their way to the coast of the Mediterranean sea, first establishing themselves at Sidon, and after many years building the city of Tyre. Aradus, Tripolis, Dora, and Joppa, we know were also numbered amongst the Phœnician cities. Strabo informs

¹ Rawlinson's *Herodotus*, vol. i., p. 471.

² Professor Rawlinson denies the identity of the two kings, but no reason for this denial is given. *Ass. Mon.* vol. ii., p. 131.

³ *Herod.* i. 1.

⁴ Justin, xviii. 3.

Babylonian, Tyrian, and Assyrian Chronology combined.

| B.C. | KINGS OF BABYLON. | KINGS OF TYRE. | KINGS OF NINEVEH. | ANNALS OF SENNACHERIB. | |
|------|-------------------|----------------|-------------------|------------------------|--|
| 747 | 1 Nabonassar | | | | |
| 6 | 2 | | | | |
| 5 | 3 | | | | |
| 4 | 4 | | | | |
| 3 | 5 | | | | |
| 2 | 6 | | 1 Tiglathpileser | | |
| 1 | 7 | | 2 | | |
| 740 | 8 | | 3 | | |
| 9 | 9 | | 4 | | |
| 8 | 10 | Hiram | 5 | | Tiglathpileser takes tribute of Menahem, Rezin, and Hiram. |
| 7 | 11 | | 6 | | |
| 6 | 12 | | 7 | | |
| 5 | 13 | | 8 | | |
| 4 | 14 | | 9 | | |
| 3 | 1 Nadius | | 10 | | |
| 2 | 2 | | 11 | | |
| 1 | 1 Chinserus | | 12 | | |
| 730 | 2 and | Mitenna | 13 | | |
| 9 | 3 Porus. | | 14 | | |
| 8 | 4 | | 15 | | |
| 7 | 5 | | 16 | | |
| 6 | 1 Ilulæus | Ilulæus | 17 | | |
| 5 | 2 | 1 | 18 | | |
| 4 | 3 | 2 | 19 | | |
| 3 | 4 | 3 | 20 | | |
| 2 | 5 | 4 | 21 | | |
| 1 | 1 Mardoc- | 5 | 22 | | |
| 720 | 2 empadus | 6 | 23 | | |
| 9 | 3 | 7 | 24 | | |
| 8 | 4 | 8 | 25 | | |
| 7 | 5 | 9 | 26 Sargon | | |
| 6 | 6 | 10 | 1 | | Sargon takes Samaria. Pekah slain. |
| 5 | 7 | 11 | 2 | | |
| 4 | 8 | 12 | 3 | | |
| 3 | 9 | 13 | 4 | | |
| 2 | 10 | 14 | 5 | | |
| 1 | 11 | 15 | 6 | | |
| 710 | 12 | 16 | 7 | | |
| 9 | 1 Archianus | 17 | 8 | | |
| 8 | 2 | 18 | 9 | | |
| 7 | 3 | 19 | 10 | | |
| 6 | 4 | 20 | 11 | | |
| 5 | 5 | 21 | 12 | | |
| 4 | | 22 | 13 | | |
| 3 | | 23 | 14 | | |
| 2 | 1 Belibus | 24 | 15. 1 Sennacherib | | Sargon associates Sennacherib with him on the throne, (and takes the title Shalmanezzer, qu.) |
| 1 | 2 | 25 | 2 | 1st campaign | |
| 700 | 3 | 26 | 3 | 2nd " | |
| 9 | 1 Apronadius | 27 | 4 | | |
| 8 | 2 | 28 | 5 | | |
| 7 | 3 | 29 | 6 | | |
| 6 | 4 | 30 | 7 | | Shalmanezzer (qu. Sargon) takes Samaria. Hoshea deposed. |
| 5 | 5 | 31 | 8 | | |
| 4 | 6 | 32 | 9 | | |
| 3 | 1 Regibelus | 33 | 10 | | "Shalman" and "king Jareb," that is, Shalmanezzer and Sennacherib, contemporaries.—Hoshea x. 6-14. |
| 2 | 1 Mesessi- | 34 | 11 | | |
| 1 | 2 mordac | 35 | 12 | | |
| 690 | 3 | 36 | 13 | | |
| 9 | 4 | | 14 | 3rd campaign | Sennacherib invades Judæa. Deposes Ilulæus. |
| 8 | | | 15 | 4th " | |
| 7 | | | 16 | 5th " | |
| 6 | | | 17 | 6th " | Susub reigns at Babylon. |
| 5 | | | 18 | 7th " | |
| 4 | | | 19 | 8th " | Susub reigns at Babylon. |
| 3 | | | 20 | | |
| 2 | | | 21 | | |
| 1 | | | 22 | | |
| 680 | Asaradinus | | 23 | | |
| 9 | | | 24 | | |

us that in his days there were islands in the Persian Gulph bearing the names of Tylus or Tyrus, Aradus, and Doracta,¹ which latter name Mr. Kenrick identifies with Dora;² and in the voyage of Nearchus up the Gulph we read of Sidodone, and Tarsia,³ on the coast of Carmania; all which sufficiently indicates close commercial intercourse between Tyre and the Gulph. "From the Persian Gulph," observes Heeren, "they extended their commerce to the western peninsula of India, and the island of Ceylon."⁴

Tarsia we assume to be the Tarshish so frequently spoken of in Scripture, and Tyre is called by Isaiah "daughter of Tarshish;"⁵ as, in fact, born of the commerce between the Persian Gulph and the Western world. The coast of Carmania, or Tarshish, in the days of the opening of this commerce, when distant voyages by sea were unknown, was probably the point on the Gulph to which the trade by caravan from the far East—from "the ends of the earth"⁶—was directed, and from thence distributed up the Tigris and Euphrates to the great cities of the world. We learn from Al-Edrissi, that in the ninth century of our era the town of Siraff, close to the site of Tarsia,⁷ was a centre of Oriental commerce which extended perhaps as far as China;⁸ and even as late as the sixteenth century, when the Eastern trade had fallen into the hands of the Portuguese, who were accustomed to voyages as far as the East Indies, the island of Ormuz on the same coast, somewhat nearer to the mouth of the Gulph, which superseded Siraff, was one of the principal stations of their trade. Thus the wealth of India and the distant East was transported in "ships of Tarshish" by way of

¹ Strabo, xvi. 3.

² Kenrick's Phœnicia, p. 48.

³ Vincent's Voyage of Nearchus, p. 358-362.

⁴ Herodotus' Manual of Ancient History Eng. Trans. p. 27.

⁵ Isaiah xxiv. 10.

⁶ Psalm lxxii.

⁷ When Jonah fled to Tarshish, it was to the Persian Gulph that he fled, not to Tartessus in Spain, as many suppose. He took ship probably at Opus, on the Tigris, a place so named by the Greeks, but which may have had the same derivation as Joppa, both being probably named by traders from the Gulph. It is a curious fact, as connected with Jonah, that some of the houses at Siraff are said to have been built with the bones of whales, showing the abundance of that fish in the Persian Gulph.

⁸ Vincent's Voyage of Nearchus, p. 365.

the Euphrates through Babylonia towards Tyre; while much of the wealth of Arabia, which was also poured into Tyre, we learn from Aristobulus was carried by the merchants of Gherra, on the Arabian side of the Gulph, on rafts up the Euphrates to Thapsacus.¹ About two hundred and fifty miles below Thapsacus, according to Niebuhr, there was a canal of five hundred miles in length direct from the Euphrates to the Persian Gulph, which being a great work to keep in repair, affords a strong indication of the extent of the traffic to and from the Gulph.²

This traffic of the Tyrians with Tarshish, and the islands of the Persian Gulph, was in active operation nearly one thousand years before the Christian era, even in the days of Solomon king of Israel and Judah, concerning whose wide dominion we read, that it should reach "from sea to sea, and from the river (Euphrates) unto the ends of the earth;" and to whom it is declared, "the kings of Tarshish and of the isles shall bring presents; the kings of Sheba and Seba shall offer gifts."³ Solomon we know had a fleet upon the Arabian Gulph, manned by the sailors of Hiram king of Tyre,⁴ by which immense produce of gold was annually imported from Ophir, on the coast of Africa. But in addition to this fleet we read that he had also another fleet,⁵ expressly called "a navy of Tarshish," an expression understood by the writer of the book of Chronicles⁶ as a navy trading to Tarshish, which together with the "navy of Hiram," (who does not appear to have had a fleet on the Arabian Gulph,) made once in three years a distant expedition, bringing back a freight of gold, silver, ivory, apes, and peacocks; a sufficient indication that this expedition was directed towards the East, and not in the direction of the Mediterranean. Some have supposed that this "navy of Tarshish" sailed from the Arabian Gulph, and that, coasting the south of Arabia, it reached some distant point in the direction of India. But it is hard to believe that such skilful navigators as the Tyrians, who

¹ Strabo, xvi. 3.

² Psalm lxxii.

³ 2 Chron. ix. 21.

⁴ Vincent's Voyage of Nearchus, p. 514.

⁵ 1 Kings ix. 26, 27.

⁶ Ibid. x. 22.

must have been well acquainted with the direct route towards the East by the Euphrates, and whose ally and associate, Solomon, was in possession of all the country lying between Tyre and the Euphrates,¹ and who moreover had built Tadmor, or Palmyra, within three days' journey of the Euphrates, with the express object of encouraging the commerce with Tipsah, or Thapsacus, a port on that river within his own dominions—it is hard, we say, to believe that two such skilful traders, in the days when navigation was chiefly conducted by the tedious operation of rowing, could have so far erred, as to have chosen a route towards the East more than a thousand miles greater in length than that by the river Euphrates. The very expression “navy of Tarshish,” in conjunction “with the navy of Hiram,” seems intended to distinguish this fleet from that which was built at Ezion-geber, which was merely manned with Tyrian sailors, but not accompanied by the fleet of Hiram.

About four hundred years later than the reign of Solomon, *i.e.* about the year B.C. 560, we have an account in the book of Ezekiel, written in the reign of Nebuchadnezzar, of the very same traffic of the Tyrians with the Persian Gulph. At this time Tartessus, or Tarshish, in Spain had been founded by the Tyrians, and silver, iron, tin, and lead were imported from that colony. But after describing the traffic of the western world with Tyre, Ezekiel goes on to describe that with the East, naming in succession Damascus, Haran, Canneh, Sheba, Asshur, at that time comprehending all Mesopotamia, Chilmad, or Carmania, according to the Septuagint, Dedan, and Razmah, both placed by Bochart in the Gulph of Persia,² while the army of Tyre appears to have been composed partly of recruits from Persia. Nebuchadnezzar, who had conquered Tyre after a siege of thirteen years, and who had built Tere-don,³ near the mouth of the Euphrates, with the view of keeping open the commerce of the gulph with Babylon, had possessed himself of the command of the whole traffic from

¹ 1 Kings iv. 21-24.

² See Vincent's Dissertation on the xxvii. chapter of Ezekiel.

³ Euseb. *Auch.* p. 28.

thence to Tyre, to the great enrichment of Babylon. After the conquest of Tyre by Nebuchadnezzar, we still find Baal reigning over that city, who, we must presume, had been placed on the throne by the king of Babylon; and about forty years later we find from Menander that two kings in succession, viz., Merabal and Hiram, were called for from Babylon, where probably they resided as hostages, to come and take possession of the throne of Tyre. The connexion between the two cities at that time was that of subordination on the part of Tyre.

Again, about two hundred and thirty years after Nebuchadnezzar's invasion, that is, about B.C. 330, Alexander conceived the idea of diverting this great Eastern trade into new channels. He subdued Tyre after an obstinate resistance, and on his return to Babylon from the East sought to make that city the capital of his empire. The Euphrates was still navigable for ships of considerable size, and we find at this period the same connexion of the fleets of Tyre with the Euphrates as in former days. We learn from Arrian,¹ that according to the ancient and common practice, which must have been adopted by Hiram in the days of Solomon, and by Ululæus in the days of Sennacherib, Alexander transported no less than forty-seven ships in pieces, on the backs of camels, from Tyre to Thapsacus, where they were launched on the Euphrates and carried down to Babylon, some being of the size of five bank of oars. Alexander had constructed at Babylon a harbour capable of holding one thousand ships, his object being to conquer Arabia, colonise the islands in the Persian Gulph, and monopolise the trade of the East; and in the feverish contemplation of this expedition he was suddenly overtaken by death.

Thus, then, we have traced a close commercial connexion between Tyre and Babylon, extending over a period of six hundred and fifty years, during which the whole trade between the eastern and western parts of the world was carried through those two cities; and during part of which time Tyre was in direct subjection to Babylon, receiving from thence

¹ Arrian, vii. 19.

her kings. We now return back to the particular reign of Hulseus, in whose time it is quite clear that, so far from submitting to dictation from Babylon, the kingdom of Tyre was in a position of such power and importance, for a time at least, as to have imposed princes, even upon that great city. In the reign of Hulseus, who was contemporary with Hezekiah, king of Judah, the prosperity of Tyre had reached the height of its grandeur. Isaiah, foretelling the destruction of the "joyous city," speaks of her merchants at that time as "princes," "her traffickers" as "the honourable of the earth." These expressions imply great grandeur and riches on the part of her citizens. But in addition to this, the prophet uses an expression concerning Tyre which implies extended dominion and imperial power, reaching over territories far beyond the precincts of the little state. Tyre is designated the "crowning city," or, as otherwise translated, the dispenser of crowns—the setter up of kings;¹ and the direction in which her dominion had extended is pretty clearly indicated to have been towards Chaldea. From the Assyrian Inscriptions we learn that there was on the Euphrates a strongly fortified city bearing the name Tsur, or Tyre.² In the same chapter of Isaiah which proclaims the greatness and approaching downfall of Tyre, the prophet points out Chaldea as the stronghold of her greatness. For, suddenly breaking off from his denunciations against Tyre, he exclaims—"Behold the land of the Chaldeans. This people was not till the Assyrian founded it for them which dwell in the wilderness. They set up the towers thereof and the palaces thereof. He (the Assyrian) brought it to ruin. Howl, ye ships of Tarshish, (that is, ye ships which trade with the Persian Gulph) for your strength (that is Chaldea) is laid waste."³

This passage alone is sufficient to prove the occupation of the Euphrates at this time by the fleets of Tyre. But the

¹ When Rezin and Pekah conspired to dethrone Ahas, "and to set a king in the midst" of Judah, "even the son of Tabeal," Isaiah vii. 6, it seems probable that Tabeal (qu. Tubaa.) was a Tyrian prince.

² See Rawlinson's map, *Anc. Mon.* vol. i., and *Journal of Sac. Lit.*, new series, ix. p. 194.

³ Isaiah xlii. 8-13.

presence of the Tyrian fleet is still more directly confirmed by the testimony of Assyrian inscriptions, the authority of which is decisive upon this point. In the annals of Sennacherib, recorded on Taylor's cylinder, we read, that this king, who had conquered Tyre in his third campaign, when in pursuit of his enemies, the Chaldeans, about three years later, who had taken refuge in the province of Elam, conducted his army over "the great sea of the rising sun,"—the Gulph of Persia—in "Syrian ships," that is to say, in those very ships of Tarshish spoken of by Isaiah, so well accustomed to the navigation of the Gulph, and so lately in the service of the king of Tyre: now, however, bewailing the loss of their stronghold in Chaldea, destroyed by Sennacherib. And much cause had the Tyrians for lamentation. For Sennacherib, we are told, had built Tarsus on the coast of Cilicia, and called it Tharsis or Tarshish,¹ borrowing the name from Tarshish in the Gulph, forming the city after the fashion of Babylon; and his views were now directed no doubt towards diverting the trade from its original route from the Gulph, through Babylon and Tyre, and directing it up the Tigris, through Nineveh, favouring the new port of his own construction on the river Cydnus.

Up to this time the whole commerce of the world, east and west, had centered in the markets of Tyre and Chaldea, and the ships in which this trade was carried on were denominated "ships of Tarshish." Notwithstanding, therefore, the position of the kingdom of Syria, with its capital Damascus, standing between Tyre and the Euphrates—to which city no doubt large tribute was paid for safe conduct—we cannot but conclude that this vast trade by caravan to the Euphrates, and from thence to Babylon and the Persian Gulph, was as much under the control of the merchant princes of Tyre, as the overland route through Egypt, in connexion with the same Eastern trade, is now under the direction of enterprising British merchants. Considering, therefore, that we find a fortified port established on the Euphrates, bearing the name of Tyre

¹ Et Tarsum urbem, ipse ad similitudinem Babylonis condidit, quam appellavit Tharsin.—Euseb. Auch. p. 21.

—that in the reign of Ilulæus a powerful Tyrian fleet occupied that river—that the pre-eminence of Tyre was such in the days of Ilulæus as to entitle that city to the designation “crowning” or imperial city—and that during five years of the reign of Ilulæus at Tyre, a king bearing the same title, Ilulæus, was seated on the throne of Babylon, on the line of commerce which formed the source of his own great riches—it is not unreasonable to assume that the Tyrian dominion had extended during that short period even to Babylon itself. But if Ilulæus of Tyre, and Ilulæus of Babylon are one, then are the years of this king distinctly fixed, as before observed, as commencing in B.C. 726–5, and terminating in B.C. 689. Moreover, whether the identity of the kings be admitted or not, the chronological argument is almost equally conclusive. For, as we have seen, the accession of Ilulæus to the throne of Tyre must have taken place within two or three years at most of the year B.C. 726, and his fall therefore within two or three years at most of B.C. 689; and when other concurrent testimony leads us expressly to this latter date as the time of his fall, the just inference is, that the year B.C. 689 was the actual last year of his reign, and therefore also the date of the third campaign of Sennacherib.

Returning now from this digression, we find that we have approached far towards the completion of our inquiry. For, having already ascertained the dates of the three kings, Tiglathpileser, Sargon, and Sennacherib, and having fixed with precision the date of one leading event in the latter reign, in connexion with the kingdom of Judah, it now only remains to select some prominent event of a similar nature from the reigns of each of the other two kings, together with their dates, in order to compare the chronology of the Assyrian Canon with the reckoning of Demetrius, and of Ussher. This we shall be able to do in a very few words.

Monsieur Oppert has arranged and interpreted the mutilated annals of the reign of Sargon, from the Khorsabad inscriptions now in the Louvre, from which we learn that Sargon in the course of the second year after his accession, that is, in the course of the year B.C. 716–15, captured the

city of Samaria, carrying away from thence 27,280 captives. M. Oppert places the date of this event in the year B.C. 720, before the accession of Sargon to the throne, with a view, no doubt, to the common reckoning of the date of the capture of Samaria in the reign of Hoshea. But if, as M. Oppert himself has observed, Sargon's twelfth year commenced in the archonship of Mannu-itti-asshur-liha, that is in the year B.C. 706, his second year must have commenced in the year B.C. 716, and have ended in B.C. 715, about which time, therefore, Samaria was overthrown.

Again, Sir H. Rawlinson has been at much pains to arrange the disjointed annals of Tiglathpileser, and writes:—"I can distinguish, I think, from the inscriptions at least three several campaigns in Southern Syria: the first extending probably from the fourth to the eighth year of the king" (that is, from B.C. 739 to 735 in our table) "and during which tribute was received from Menahem of Samaria, and Rezin of Damascus"—when also Hiram was reigning on the throne of Tyre—"the second some years later, perhaps about B.C. 738 (731 in our table) when the cities of Samaria were plundered, and the inhabitants were carried away into captivity; and the third, which may have been a mere continuation of the second, and which must have occupied a large portion of the remainder of the king's reign."¹ Thus—Tiglathpileser took tribute of Menahem, say in his

| | |
|--|----------|
| fifth year | B.C. 738 |
| Sargon captured Samaria in 716, or | 715 |
| Sennacherib came up against Judæa in | 689 |

Such is the reckoning of the Assyrian Canon. Let us compare these dates with the reckoning of Demetrius.

According to the record of Demetrius—

| | |
|---|-----|
| Menahem reigned over Samaria from B.C. 746 to . . . | 737 |
| Samaria was deprived of its native king for nine years in . . . | 715 |
| Sennacherib came up against Judæa in | 689 |

And now let us compare the reckoning of the Assyrian Canon with the chronology of Ussher.

¹ *Athenæum*, August 22, 1868.

The Hebrew Chronology of Demetrius and Ussher compared with the Assyrian Canon, and with reference to the Sabbatical years of the Jews.

| B.C. | KINGS OF NINEVEH. | EVENTS SELECTED FROM ASSYRIAN INSCRIPTIONS. | CHRONOLOGY OF DEMETRIUS. | CHRONOLOGY OF USSHER. |
|--------|-------------------|---|--------------------------|-----------------------|
| 770 | | | | Menahem 1 |
| 9 | | | | 2 |
| 8 | | | | 3 |
| 7 | | | | 4 |
| Sab. 6 | | | | 5 |
| 5 | | | | 6 |
| 4 | | | | 7 |
| 3 | | | | 8 |
| 2 | | | | 9 |
| 1 | | | | 10 |
| 760 | | | | Pekahiah 1 |
| Sab. 9 | | | | 2 |
| 8 | | | | Pekah 1 |
| 7 | | | | 2 |
| 6 | | | | 3 |
| 5 | | | | 4 |
| 4 | | | | 5 |
| 3 | | | | 6 |
| Sab. 2 | | | | 7 |
| 1 | | | | 8 |
| 750 | | | | 9 |
| 9 | | | | 10 |
| 8 | | | | 11 |
| 7 | | | | 12 |
| 6 | | | Menahem 1 | 13 |
| Sab. 5 | | | 2 | 14 |
| 4 | | | 3 | 15 |
| 3 | | | 4 | 16 |
| 2 | 1 Tiglathpileser | | 5 | 17 |
| 1 | 2 | | 6 | 18 |
| 740 | 3 | | 7 | 19 |
| 9 | 4 | | 8 | 20 |
| Sab. 8 | 5 | Takes tribute of Menaham, king of Samaria. | 9 | |
| 7 | 6 | | 10 | |
| 6 | 7 | | Pekahiah 1 | |
| 5 | 8 | | 2 | |
| 4 | 9 | | Pekah 1 | |
| 3 | 10 | | 2 | |
| 2 | 11 | | 3 | |
| Sab. 1 | 12 | | 4 | |
| 730 | 13 | | | |

kingdom of Samaria suspended.



According to Ussher—

| | |
|---|----------|
| Menahem ceased to reign in | b.c. 761 |
| Samaria was taken by Shalmanezzer. | 721 |
| Sennacherib invaded Judaea in the fourteenth of | |
| Hezekiah. | 718 |

Thus, it appears, that the reckoning of Demetrius is in perfect unison with the Canon, throughout the fifty years which we have been examining, and that the capture of Samaria by Sargon was concurrent with the fall of Pekah, king of Israel, after whose reign the kingdom of Israel was deprived of its native ruler for nine years, and not with the fall of Hoshea; while the chronology of Ussher differs from the Canon to the extent of twenty-three or twenty-four years in excess. But how, it will be asked, have the three Assyrian scholars treated these manifest difficulties?

M. Oppert and Dr. Hincks, taking it for granted that Ussher and Clinton must be right in fixing the date of the capture of Samaria by Shalmanezzer in the year b.c. 721, begin first by torturing the capture of Samaria by Sargon, into the capture of that city by Shalmanezzer, and take this year as the fundamental date of their reckoning.¹ If this were the true key to the adjustment of Assyrian and Hebrew history, during the three reigns under discussion, we might expect, of course, to find the several events recorded in the annals of the two countries ranging themselves together without difficulty or collision. It is an evidence, therefore, that they have proceeded upon a false assumption, when we find that the adoption of this date leads them into insuperable difficulties. Thus, if Samaria was conquered in 721, in the sixth year of Hezekiah, the last year of Menahem of Samaria, which was concurrent with the forty-ninth of Uzziah, must have fallen in b.c. 761. But the year b.c. 761 stands nineteen years before the accession of Tiglathpileser, who in his fourth or fifth year took tribute of Menahem. Now Dr. Hincks, who is followed by M. Oppert, boldly meets this difficulty by proclaiming the incompetency of the transcribers of the Assyrian Canon.

¹ Shalmanezzer was contemporary with So, or Sabaos, king of Egypt, who, according to Manetho, was not on the throne so early as b.c. 721. Dr. Hincks and Prof. Rawlinson accordingly alter the record of Manetho to suit their purpose.

In a recent treatise on the Egyptian dynasties of Manetho, bearing date, 1863, a copy of which has been presented to the Society, Dr. Hincks writes:—"As respects Sir Henry Rawlinson's Canon, this is not a cotemporary document, but a compilation made by an unknown person in the reign of Asshurbanipal. Its inconsistency with my restoration of Manetho, supported as this is by astronomical observations, proves that the compiler was a blunderer."¹ He charges the compiler therefore with omitting the names of thirty archons. This is indeed a ready mode of getting rid of adverse testimony, but is supported by no substantial argument. On the contrary, Sir H. Rawlinson has frequently declared that there is not the slightest foundation for any such idea. When also we consider that it must have been not one blunderer only, but four independent and incompetent scribes—one of them living in the reign of Sennacherib—who have combined to omit the exact number of archons required by Dr. Hinck's reckoning, the idea is simply incredible. Sir Henry Rawlinson sees the absolute necessity of bringing down the reign of Menahem so as to range with the early years of Tiglathpileser, and thus avoids the false position of his two Assyrian coadjutors. Under the influence, however, of what we consider to be a false Egyptian reckoning, he fears to make the necessary alteration of the same number of years in the following reigns, and making therefore an arbitrary arrangement of the reigns of Jotham, Pekah, Ahaz, and Hoshea, which he candidly confesses, "is open to many serious objections," arrives at the conclusion that Sennacherib must have invaded Judæa both in the fourteenth and twenty-seventh years of Hezekiah."²

But to pursue Dr. Hincks through the difficulties—overwhelming indeed to any ordinary controvertist—in which he is involved by his assumption, that Sargon's capture of Samaria was that which followed immediately after the siege by Shalmenezer. Scripture informs us that eight years after the fall of Samaria (in 721, as he supposes), in the fourteenth year of Hezekiah, B.C. 713, Sennacherib came up against

¹ Egyptian Dynasties of Manetho, Part i., p. 9.

² Athenæum, August 22, 1863.

Judæa. But this date is found to be ten or eleven years before the accession of Sennacherib to the throne, according to the Canon. The same ready mode of avoiding the difficulty is, therefore, again adopted, as in the case of the four Assyrian scribes. The Jewish scribe—who was, probably, no less a person than Ezra himself—is at once declared to be in error, and the suggestion is, that in three places in Scripture where we read “fourteenth year of Hezekiah,” we should amend the reading to “twenty-seventh of Hezekiah.”

With unfeigned respect for the learning and ability of Dr. Hincks, who has performed such invaluable services in deciphering and laying before the public the very materials upon which in great measure we are enabled to found our argument, few, we presume, will be disposed to follow him in such a mode of proving the consistency of the Assyrian Canon with the current Bible chronology. Every attempt at reconciliation of the Canon with Ussher’s dates, even in the able hands which have undertaken it, leads to nothing but rejection or violation of authorities, hitherto supposed to be worthy of trust; and should it be admitted that the dates which we have attached to the Assyrian Canon have been correctly arrived at, it is, we submit, clear beyond question, that the Hebrew chronology of Ussher and his followers is antedated to the extent of twenty-three or twenty-four years.

Before we conclude, let us advert to a great difficulty which appears to overhang the Assyrian Canon, whether viewed in connexion with the chronology of Ussher or Demetrius, viz., that the name of “Shalmanezzer, king of Assyria,” who plays so prominent a part in Scripture in the overthrow of Samaria, is not included amongst the kings named in the Canon. The necessary inference seems to be, either that he was a subordinate prince, not counted at Nineveh amongst the sovereign rulers of Assyria, which is apparently inconsistent with what we read concerning him in Scripture, or that he was identical with one of the kings named in the Canon. We cannot ignore his existence; and if the reckoning of Demetrius is correct, the ten tribes were carried away by this king into captivity four hundred and seventy-three years and nine months before the

reign of Ptolemy Philopator, that is in the year B.C. 696–5.¹ But if this be so, then must Shalmanezzer have reigned over Assyria in the course of the same twenty-four years which the Assyrian Canon assigns to the reign of Sennacherib. Now we have already observed that there is an apparent blank in the reign of Sennacherib of ten years, during which nothing is recorded concerning him; and we have also observed that Sargon must have taken his son Sennacherib into association with him on the throne before he had himself ceased to reign. Are we then driven to the conclusion that Sargon, Sennacherib, and Shalmanezzer all reigned in Assyria together? This would indeed be a strange conclusion to arrive at. No, the probable inference is, that when Sargon in his fifteenth year, B.C. 702, thought fit to take his son Sennacherib into the government, he himself assumed the ancient and well-known title Shalmanezzer. That Shalmanezzer and Sennacherib were on the throne at the same time, appears to be placed beyond question by the contemporary writings of Hosea. Speaking of the impending destruction of Samaria, which we know took place after a three years' siege by Shalmanezzer, "when the king of Israel shall be utterly cut off," the prophet writes—"all thy fortresses shall be spoiled, as Shalman spoiled Beth-arbel."² Strange comments have been made upon this passage; but, with Rosenmüller, we are of opinion that Shalman here signifies no other than Shalman-ezer, by whom Samaria was besieged. But if so, this Shalman was reigning in the time of Sennacherib. For in the same chapter of Hosea which speaks of Shalman, and with reference to the destruction of Samaria, and the calf, that is the golden calf, of Bethaven worshipped by the ten tribes, the prophet writes—"it shall also be carried into Assyria, for a present to king Jareb." To no other king of Assyria, living about the time of the fall of Samaria, can this appellation be applied, except to Sennacherib, or San-akh-

¹ "Demetrius says," in his work concerning the kings of Judea, "that from the time when the ten tribes were carried away from Samaria, to the reign of the fourth Ptolemy, was a period of five hundred and seventy-three (read four hundred and seventy-three years) and nine months, and from the carrying away from Jerusalem three hundred and thirty-eight years and three months."—Clem. Alex. Heinsii. Strom. i. p. 337.

² Hosea x. 14, 15.

Jareb. So that, in fact, we are here told that Shalmanezzer shall present the golden calf of Samaria as a trophy to Sennacherib.

Again, that Shalmanezzer and Sargon were one, is supported by the fact, that the same acts which the Tyrian annals appropriate to Shalmanezzer were actually performed by Sargon. There is a statue of Sargon now in the Berlin Museum, brought from Idalium in the island of Cyprus, a city not far from Citium, proving that Sargon, who usually set up his image to mark his conquests, had brought under subjection the Citians; and these are the very people which are spoken of in the Tyrian annals as subdued by Shalmanezzer.

M. Oppert, on the assumption that Shalmanezzer reigned in B.C. 721, just before the reign of Sargon, discusses the question of the possible identity of Sargon and Shalmanezzer, and justly decides against it, on the ground that no king who had once borne the title Shalmanezzer, one of the ancient and revered titles of the Assyrian monarchy, would have afterwards recorded the actions of his first fifteen years under the title Sargon, or king *de facto*. But place the reign of Shalmanezzer, with Demetrius, about the year B.C. 696, and the argument is reversed. For Sargon, the plebeian, may well have assumed the ancient title Shalmanezzer, when after fifteen years of warlike exploits he had firmly seated himself on the Assyrian throne.

The assumption, then, is not unreasonable, that Shalmanezzer and Sargon were one and the same king; and this, if we come to consider, is exactly what may be inferred from the words of one who was living at Nineveh in the reign of Shalmanezzer.

Many are disposed to treat the book of Tobit as unhistorical, owing to the legend and superstition contained in it; and yet such men as Ussher, Prideaux, Sir I. Newton, and the late Mr. Fynes Clinton, have by no means looked upon it as unhistorical. Now Tobit, the Jewish captive, who had been carried to Nineveh by Enemessar, that is, Shal-enemessar, king of Assyria, tells us that he was purveyor to that king. No one, therefore, could be better qualified to inform us of the relationship of Sennacherib to the king, and his testi-

mony goes directly to the point. For he tells us that, "when Enemessar was dead, Sennacherib, his son, reigned in his stead." If, then, Enemessar was father to Sennacherib, Sargon and Enemessar were one. For Sennacherib, unquestionably, was the son of Sargon.

And now we can understand the expression of Abydenus, who, when speaking of Sennacherib, observes that he was the twenty-fifth king of Assyria, and yet "scarcely to be reckoned amongst the kings." Though nominally seated on the throne as early as the year B.C. 702, two unimportant campaigns form the only record of the thirteen first years of his reign; while the burthen and the glory of the kingdom during that time seems to have been sustained by the energy of his father Shalmanezer. Copy No. 1 of the Canon, as before observed, does not even recognise Sennacherib as holding office till the nineteenth year of his association with his father, leaving but six years for his sole occupation of the throne; and during those few years the greatness of the empire seems much to have suffered. From one who was inmate in his father's palace,¹ we learn, that when he came to the throne on the death of his father Enemessar, "his estate was troubled," so that the writer "could not go into Media;" and from Josephus² we learn that in the reign of Sennacherib, that is in the year B.C. 688, as we have elsewhere shown, the Medes shook off the yoke of Assyria, and set up for themselves kingly government. Of these adverse events nothing, of course, is recorded in the annals of the king. The campaigns against Tyre, and Cyprus, and Samaria, conducted by Shalmanezer, must have taken place while Sennacherib was quietly taking his ease in his palace at Nineveh; and even when in his fourteenth year he roused himself to take part in six successive campaigns, so flatteringly described by his annalist, we know that from one of them at least he must have returned in disgrace to Assyria, having lost the greatest portion of his army in the disastrous expedition against Palestine and Egypt. His devotional tendencies and inactive disposition seem to have been known even to the Jewish

¹ Tobit, i. 15.

² Joseph. Ant. x. ii.

prophet, who, when foretelling the impending destruction of Samaria by the sword of the warlike Shalmanezar, selects from the anticipated spoils of the campaign the golden calf of Bethaven, or Bethel, the idol of Samaria, as the most appropriate and acceptable present for king Jareb in Assyria, who at the same time is by no means referred to as about to take part in the hazards of the campaign. Building and architecture seems to have occupied much of his attention, and we find Sennacherib represented in the sculptures seated in a chair superintending the operations connected with the building of his palace. His inactive and devout disposition, however, whether proceeding from indolence or infirmity, was ill calculated to command the obedience of his subjects in the tumultuous times upon which he had fallen; and accordingly after losing the province of Media, and after another serious revolt of the province of Babylon, ending after many years by the accession of the warlike Esarhaddon to the throne—whether in revolt or in support of his father we are not informed—we find his two sons Adrammelec and Sharezer conspiring against him, and watching their opportunity while the king was worshipping in the house of Nisroch his god, smiting him with the sword, thus terminating ignominiously his short and inglorious reign.

We have now shown by three several instances, drawn from the respective reigns of Tiglathpileser, Sargon, and Sennacherib, how the dates of Ussher's chronology are at variance with the Assyrian Canon to the extent of at least twenty-three years in excess, and how, on the other hand, the reckoning of Demetrius is in perfect accordance with the dates of the Canon. We have also shown how the capture of Samaria by Shalmanezar, which, according to Scripture, must have taken place in the reign of the Assyrian king Jareb, is by the reckoning of Demetrius placed in the reign of Sennacherib, proving again the consistency of that reckoning both with the Canon and Scripture. But if Ussher's chronology must thus be rectified to the extent of twenty-three years between the years B.C. 740 and 680, a similar rectification would appear to be required both in the preceding and succeeding

centuries; and in pointing out how this continuous error is found to exist throughout the times of the Jewish monarchy, we are led to one or two interesting points in history which have formed the subject of much controversy in the present day, and which the proposed rectification of Hebrew chronology seems to set at rest.

We have elsewhere already shown how, according to Polybius and other authorities, the colony of Carthage was founded in the year B.C. 846, and how according to Josephus and the Tyrian annals the foundation of the temple of Jerusalem was laid just one hundred and forty-four years before that date, that is in the year B.C. 990, being twenty-two years lower than the date assigned to that event by Ussher, and in perfect agreement with the reckoning of Demetrius.¹

Again, the king whose annals are recorded on the black obelisk in the British Museum, and who is styled Shalmanezzer II. by Sir Henry Rawlinson, reigned, according to the Assyrian Canon, thirty-four years, from B.C. 856 to 823, and the date of his reign is, as we have said, as securely fixed as any of the early reigns of the Canon of Ptolemy. Now Sir Henry has pointed out that Hazael, king of Damascus, contemporary of Jehu, king of Israel, came to the throne in the fourteenth year of this king's reign, that is in B.C. 843; and Jehu is also represented on the obelisk as having sent tribute to this king. But the accession of Jehu to the throne of Israel is placed by Ussher in the year B.C. 884. There is no means of determining precisely the number of years which the reign of Jehu must be lowered with reference to the reigns of Shalmanezzer and Hazael. But if we adopt the reckoning of Demetrius we shall find that this historian again forms a perfect link between Scripture and the Assyrian Canon.

If we now descend to the year B.C. 610, we fall upon an astronomical controversy, which has lasted now about fifteen years, concerning the true date of the eclipse of Thales. Every one is aware that many important events in ancient history, such as the fall of Nineveh, the rise of the kingdom of Babylon, the marriage of the grandfather of Cyrus king of

¹ Trans. Chron. Inst., vol. ii., part iii., p. 42.

Persia, and especially the death of Necho king of Egypt, soon after the battle of Carchemish, fought in the first year of Nebuchadnezzar king of Babylon, cluster round the date of this eclipse, which has generally been placed by modern chronologists in the year B.C. 610. Now the Astronomer Royal we know has proved, in two papers read before the Royal Society, that the ancient date attached to this eclipse by Pliny and others, viz., B.C. 585, is the true date; thus placing all the events connected with it just twenty-five years lower than by the common reckoning, and again in accordance with the reckoning of Demetrius, who places the first of Nebuchadnezzar in B.C. 582. Dr. Hincks is well aware that his arrangement of Egyptian chronology must fall to the ground if the record of Pliny is confirmed by astronomical reckoning; and we find him therefore vehemently opposed to the Astronomer Royal, and demanding that the lunar tables set forth by Hansen may be tested by the record of certain lunar eclipses of ancient history to which he refers. Mr. Airy, on the other hand, who has tested his theory by reference to the recorded solar eclipses of ancient times, declares that every total solar eclipse is at least fifty times as valuable as any lunar eclipse, and that a total eclipse of the sun is at least ten times as accurate as any other eclipse of the sun when applied as a test of the accuracy of the lunar tables. Here then, again, we find about the same number of years required to be lowered in the sixth century B.C. as we have already found in the eighth and tenth.

Descending again to the fifth century B.C., we fall upon a controversy which is now agitating the minds of many earnest and conscientious writers, viz., the question of the authenticity of the book of Daniel. The writer of this book we are aware professes to have lived in the reign of Darius the son of Ahasuerus, and tells us that he was first minister of that king. Yet not without some show of reason, this book is declared to be a spurious production. For as long as it is beset with the chronology of Ussher, so long shall we search in vain for the great king Darius whom Daniel calls his master; and as for Ahasuerus, we are taught

to believe that the Jews under this title represented not only Cyaxares, which is correct, but also Astyages, Cambyses, and Xerxes, or Artaxerxes. Rosenmüller, one of the most cautious of these writers, accuses the author of this book of confounding the reign of Darius son of Ahasuerus with the reign of Darius son of Hystaspes; while Bunsen and others, finding Greek words in the text, declare that the book of Daniel could not have been written earlier than the reign of Darius son of Hystaspes. Here again if we lower the reckoning of Ussher about twenty-five years all difficulty disappears. For thus, as the reckoning of Demetrius leads us to infer, Darius the master of Daniel becomes Darius the son of Hystaspes; and thus again the record of Josephus, that Ezra's return to Jerusalem was in the seventh year of the reign of Xerxes, and the tradition preserved by Maimonides, that this return was in the thirteenth year of the building of the second temple, is in harmony with the book of Daniel, which informs us that Darius took "the kingdom," whatever that expression may signify, when about the age of sixty-two, that is in the year 484 B.C., and laid the foundation of the second temple in the following year.

Much yet remains to be done in the adjustment of Persian chronology to the altered reckoning. Some materials, however towards this purpose have already been laid before the Society by Sir Henry Rawlinson. And thus we may hope that the foundation has been laid for a rectification of the whole range of Asiatic chronology for a period of nearly nineteen hundred years before the Christian era; to the honour of the Society which has laid before the world so many new historical facts in Asiatic history, and to the immortal name of the distinguished member of the Society who has rescued these materials and especially the precious relic which we have now been considering, literally from the dust.

ART. VIII.—*On the existing Dictionaries of the Malay Language.*

BY DR. H. N. VAN DER TUUK.

THE purpose of the writer of this paper is, to call the attention of Oriental Scholars to the state of our knowledge of the Malay language, and especially to the dictionaries to which we must have recourse in studying it. An Englishman naturally turns to Marsden, and there can be little doubt that he will find it a valuable help in his labour. But the scholars of Holland, who have continued to study Malay, not only complain that Marsden's Dictionary has become antiquated, but that it cannot be relied on in a number of cases, being occasionally faulty both in the pronunciation which it teaches and in the signification which it attaches to the words. Marsden himself honestly admitted that he did not study the language until after his return to Europe, and that he had compiled his work from vocabularies made by persons who, having studied for merely practical purposes, had collected words without knowing either their orthography or correct pronunciation; hence we find in it a great many words which are never met with by readers of Malay books.¹ Notwithstanding this defect, the work of Marsden has become the basis of the dictionaries published in Holland and Batavia, and Dutch lexicographers have worked upon it without noticing its deficiency, literally copying its gravest errors.

The last dictionary produced in Holland, that of Pijnappel,² although its compiler has profited by the latest researches of

¹ As e.g. *brish*, *bekam*, *sac*, *garangung*, instead of *bārish*, *bākam*, *sācō* (or *sakap*), *garāngun*, etc.

² *Malaisch-Nederlandsch Woordenboek, naar het werk van Dr. W. Marsden en andere bronnen bewerkt* Amsterdam, 1863.

the Dutch in this branch of Oriental philology, is still tainted with the errors which Marsden has fallen into, and is, in fact, built upon Marsden as its groundwork. In addition to this, the work of Pijnappel contains also not only all that Crawfurd collected from various sources which are not to be depended on, but also many words found in the writings of persons who had no pretension to be learned in the language, and who were unable to catch the true pronunciation of words from the lips of unsophisticated natives.¹ Moreover, Pijnappel is not a safe guide for a young student on account of the uncertain spelling² which he has adopted, and which is not formed on any consistent principle. I am ready to admit that Crawfurd's Dictionary, which is now considered in England as the standard dictionary, is more copious than any of its predecessors, as the author says; but I feel compelled to observe that, notwithstanding its superior copiousness, it has made the study of Malay more difficult than it was before its publication, because it is constantly leaving a learner in doubt about the sounds of the language by so many words occurring twice over with various pronunciations.³ The author, moreover, who does not seem to understand Dutch, has taken no account of what Dutch scholars have written on the subject since Marsden's time. What would an Englishman say of a Dutch work on Ceylon the writer of which was unacquainted with English? Crawfurd's Dictionary cannot safely be placed in the hands of an early student, as the orthography adopted in it would only lead him into error and make him turn over its pages in vain for many words of frequent occurrence.⁴ Mistakes of Marsden's

¹ As for example, *تينق* (*tenek*) instead of *تنق* (*tñuk*), *bidda* for *pidda*.

² E.g. *lang*, a kite, is spelt *لح*, but *ret*, tightly, *رات*; what principle has led the author to use the *slif* in the last word? *kénit*, is spelt *كنيت* against the common orthography; now will not the student stumble at *كويت*, as it is written by the natives?

³ E.g. *tāmbun* and *timbun*.

⁴ The colourless vowel *ä* (as in *testāment* or *altār*) is represented by Crawfurd sometimes by *ä*, and another time by *i*, as for instance in *kütter* (a spittoon) instead of *kütor*, and then again by *u*, as in *tudung* for *tüdung*.

have of course been reproduced in it, such as *lang* instead of *long* (a coffin), and *charpaley* is still explained to mean "a kind of lizard."

There can be no question that a new Malay Dictionary is urgently needed at the present time. To the compiler of such a work we would suggest that, to avoid the errors into which former lexicographers have fallen, he should be cautious in receiving words from sources which he may have reason to mistrust, and rather leave some words untransliterated, if he never heard them pronounced by natives, however evident their meaning may be to him from their frequent use in Malay compositions. The words adopted from the Arabic and current in Malay should be transliterated according to their Malay sound, as e.g. *hayun pidarain* (an amphibious animal), which is the Arabic حَيَّ فِي الدَّارَيْنِ (living in the two abodes). The peculiar sense in which some of them are used in Malay should also be carefully noticed; the word دَابَّة for instance is not understood by the uneducated Malay as meaning *animal*, but only in the sense of دَابَّةُ الْأَرْضِ (*dabbatu 'larti*), being the name of the beast that will appear before the dawn of Doomsday as one of its premonitory signs.¹

In order to avoid useless repetition, a Malay Dictionary should be preceded by an outline of the grammar and phonetic system of the language, for easy reference in the work itself: and the deviations in pronunciation and meaning that have taken place in words adopted from other languages should be scrupulously marked.

Several of those words are subjoined which either have found no place in existing dictionaries of the language or have been erroneously transliterated or explained.

¹ In the latest Malay Dictionary published in Holland the Arabic words have been explained only according to their meaning in Arabic; which proceeding may be termed mere luxury, as the Arabic scholar has no occasion for it, and the Malay student is not benefited by it.

أَدَان (udani, compare wadani) name of a drug, against intestinal worms, *quisqualis Indica* (Batav. Mangkas. id.).

أَس (daśa) 1st. = suwasa; 2nd, name of a small palatable sea-fish of a glittering appearance (Men.).

أَشُور (asura, Ar.) another name of the month *Muharram* (Men., Jav. sura).

أَمُوق (ampu) — tangan = ibu-tangan; — kaki = ibu-kaki (Men.; Batak ompu: grandparent).

أَوَم (upom, Tamil) mangupam: to polish (a mirror, metal, etc.).

بَاوَن (bauw) = bau: bauw-bauwan = bau-bauwan; sabauw = sabau; mambauni = mahidu, and often used at the same time with this word (Men.).

بَغَاكَاتَق (bingkatak) = katak (Men., Dayak bakatak).

بَغَكْس (bangkès) bèbangkès = baksin (Batav.).

بَلَقِس (Arabic, pronounced bulkis or bulakis) name of the queen of Shabá; Men.: puti (i.e. putri) balukis or balukih).

بَلَنْتَار (bālāntara, corrupted from the Sansk. wandantara) name given to an extensive forest.

بَنْتَق (buntak) = buntar (Men.).

بَنْج (banohi, Tamil wānchi) a carpenter's adze.

بُومُوتْرَا (būmi-putā, Sansk. bhūmi-putra) a native, an aboriginal (Men.).

بِيدَل (bidal) = didel (Batav.).

بِعَّة (Ar.) = بَيْعَة كَاتَابِي (a place of worship for infidels following prophets acknowledged by the Muslim).

بِغَر (begar) I. amphibious in appearance, as a masculine looking woman, a hermaphrodite; mixed up (of the brogue of a person speaking a foreign language and blending it with words of his own) (Men.).

II. bārbezar: to turn about; said also of people fencing in the native way by skipping about; bārbezar begar: to wheel about in flying (as a bird); mambezar: to make something turn about, e.g. a quid of prepared betel-leaf in the mouth before spitting it out; mambezdri: to turn about before an entrance; for instance, as a bashful person does, who dares not enter straightway (Men.).

تَاسَق (tāsak) the juice of the salve plant, or *conyza balsamifera*, squeezed out as a remedy for the wound of circumcision (Men.).

تَرَانَق (tarānak, from تَانَق) = hidup-hidupan (Men.).

تَرَنْك (tarungku, Port. tronco) prison, the stocks (Mangkas. and Javan. id.).

تَنْغ (tunggang) steep, precipitous as a mountain path, etc.; úrat —: the chief root of a tree, which enters the ground perpendicularly; bāri-tunggang: to pounce flying with the head downwards, as a bird upon its prey (Men.).

تَلِيدَر (tālador, Port. traidor) vagabond (abusive term).

تَم (tam-tam, or tom-tom and tén-

گَرِیگَ (garigik) = *parigan* (Ben-
coolen; Bat. *garigit*).

گَنْدَرَنْجَ (ganddrang, the Bugis *gan-
rang*) a war drum; (Batak *gor-
dang* and *dinggèrang*, Iloco *gar-
dang*).

لِیْنَسُ (lingsu, Port. *lenço*) handker-
chief (Batav.).

لَکَرِ (lâkar) a pedestal of rattan to
put cooking pots upon in order
not to spoil the floor (Batak *rohar*
and *okar*: a kennel of rattan or
matting); *lâkar lâkar*: a small
animal looking like a centipede,
which owes its name to its re-
sembling, when coiled up, a
lâkar (Men.; the analogy of the
Batak *hârpe-hârpe*, which has the
same meaning, and is derived
from *hârpe* = *lâkar*, is striking).

لَلَّ (lâlap) = *lâdur* (Men.); 1.
sound (used of sleeping); 2.
to be forfeited (as something
pawned; compare the Batak
lolôp, forfeited; *nop*, forfeited;
and *nok*, sleeping of the eyes).

مُحَلِّلِ (muhallil, Ar.) the legal
term for *ohina-bûta*.

مَنْسِ (mansî-mânsî) = *suntung*
(Men.; *mânsî* would be the Men.
pronunciation of the Javanese
and Batak *mangsi*: ink, from the
Sansk. *masi*).

نَاحِیَّتِ (nâchat, seldom *âchat*) =
pâchat (Men.).

نِکُمْبِلِی (Tamil *nigumbilay*)
= Sansk. *nikumbhild* the place
where offerings with fire, ghee,
etc., are made.

هَرَّتِ (hârat, or *rat*) tightly pulled
or drawn.

هَوَسَمِ (Tamil *omam* = Sansk.
homa) an offering with fire,
ghee, etc.

هَیْدِ (hidu) *mahidu*: to smell, to
smell at something (Men.; com-
pare هَیْدَغِ: nose).

[Men. means the Menangkabow
dialect, of which a great many
words prevail on the East coast,
although with a different pro-
nunciation; v.g. هَالَلِغِ (*hâllang*)
= *lâlang* is also used in Siak;
سُرُو (*sturo*) = *mandarsah* is also
used in Pasey, etc.]

*Bilingual Legends: Cuneiform & Phœnician;
, from Clay Tablets in the British Museum.*





















































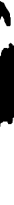





































Tadum : *blat khavut*

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 2. *Yadoni* *Had -- khag...*
 3. *Yadoni* *Had -- khag...*

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






























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ART. IX.—*Bilingual Readings—Cuneiform and Phœnician.*
Notes on some Tablets in the British Museum, containing
Bilingual Legends (Assyrian and Phœnician). BY MAJOR-
 GENERAL SIR H. RAWLINSON, K.C.B., Director R.A.S.

AT the last Anniversary Meeting of the Society I announced the discovery among the Assyrian collections in the British Museum of a certain number of clay tablets, bearing legends, both in Assyrian and Phœnician; and I promised at an early period to publish these Bilingual readings in the Society's journal, in order to afford those critics of the late Sir G. Lewis's school, who still disbelieve, or affect to disbelieve, in Cuneiform decipherment, an opportunity of testing the general accuracy of the phonetic system, now accepted amongst Assyrian scholars, by comparing the signs which they suppose to be unknown with those of a known alphabet and language.¹ That promise I now propose to redeem. I have no wish,

¹ The weak point in Cuneiform decipherment, and that which, from its prominence, has especially tended to discredit the science, is the difficulty of reading proper names. Now, I have never attempted to conceal this defect; on the contrary, I have repeatedly explained that as Assyrian proper names are usually composed of the name of a god, represented by an arbitrary monogram, and of one or two other elements, expressed by the primitive Turanian roots, it requires a very large induction, and if possible, collateral illustration, to ascertain how such compounds were pronounced in vernacular Assyrian. I should have been quite content, for my own part, in all such doubtful cases, to have indicated the names by mere signs (x, y, z, and so forth), but this was generally declared inadmissible, and I was obliged, therefore, to propose some reading, guarding myself, however, against the charge of empiricism by a query (?). Of course, as my studies advanced, other readings occurred to me as preferable, and were accordingly substituted, and it thus happens that in my published papers the same name will be sometimes found to exhibit successively three or four different forms; but this is rather an evidence of good faith than of imposture. I candidly confess that I am still in doubt as to the ordinary and vernacular pronunciation of the names of many of the chief divinities of Assyria (such as Oronos or "Belus,"    ; "the Water God,"     ; "the God of the Air,"    ; the Assyrian Hercules,         ; and "the Great Goddess,"         ); and that my proposed readings of the names of kings in which these elements occur, are therefore in no way to be depended on; but this uncertainty does not in the least affect the authenticity of the transcriptions of historical inscriptions, which are written for the most part phonetically, and the grammar of which can be analyzed with as much confidence as any portion of the Hebrew Scriptures. It can hardly, indeed, be necessary for me to vindicate at any length the preliminary stages

at the same time, to exaggerate the importance of this discovery. In reality, the so-called Phœnician key has added but very little to our knowledge either of the Assyrian alphabet or language, and I cannot, therefore, regard it as of any essential value. Nevertheless, its practical utility in meeting a specious argument of the sceptics is obvious, and I recommend it, accordingly, to their serious consideration.

Among the multitudinous clay tablets in the British Museum, brought from the ruins of Nineveh, where, as it is well known, they were found among the "debris" of what was formerly the Record Office of the Assyrian kings, there are a considerable number which represent legal documents. These documents relate to all the varied transactions of the social life of the Assyrians, and are precisely of the same character as the deeds of which copies would be found in the Registry Office of any Mahomedan *Mehkemeh*. It seems, indeed, to have been anciently the practice, as at present, for parties who were engaged in the every-day dealings of life, whether of sale, or barter, or exchange, or lease, or loan, or gift, or dedication, or similar matters of business, to repair to the law-officer of the locality, before whom they recited their terms of bargain, and authenticated the same by their seal or mark, and from whom they received a written and legal recognition of the contract. The inscribed tablets thus executed in the Assyrian Office of Registry, and referring to law business, are of a very peculiar shape, and altogether different from the larger tablets,—found, however, in the same collection,—which refer to general matters, such as history, mythology, geography, astrology, revenue, and statistics, and more particularly to grammar and philology. They are for the most part oblong and flat, but bulging in the middle, rarely exceeding a few inches in length, and very much resembling in shape a modern pincushion. The material of which they are composed is of every variety, from the finest hard-baked clay, resembling Roman "terra-cotta," and as durable as marble, to a soft friable earth, which seems to have hardly undergone any burning process whatever, and which crumbles under the touch. A few of these softer specimens, also, from Assyria are found to exhibit a peculiarity of formation which is common in

of Cuneiform inquiry, now that "the Institute of France" (as I stated in my letter to the "Athenæum," of August 22, 1863), "the first critical body in the world, has conferred its biennial prize, of 20,000 francs, on Monsieur Oppert, for his Assyrian decipherments, thereby guaranteeing in the face of Europe the authenticity and value of our labours, and putting to shame the continued scepticism of England."

Chaldees. They are, in fact, double, or inclosed one within the other, the inner solid tablet, and the outer casing, being both inscribed with the same, or nearly the same, legend.


I shall examine later the legal formula under which the conveyance of property was executed in Assyria, as evidenced in these tablets, and shall also notice the curious substitution in some instances of nail-marks for seal-impressions, to authenticate the transfer; but I must first exhaust the subject of the bilingual readings.²

A certain number, then, of these "Registry" tablets, in addition to the Cuneiform text, which covers both their sides, bear also upon the margin a "docket" in Phœnician characters, which in most cases was evidently inscribed while the clay was yet soft, and thus formed part of the original document, but which occasionally seems to have been scratched on the hard pottery by the Record Keeper at a later period, for the mere convenience of reference. The docket, as might be supposed, usually describes the nature of the deed, but sometimes it merely gives the name of the party disposing of his property. Unfortunately, in hardly a single instance are the two legends—the Phœnician docket, that is, and the corresponding expression in the Cuneiform text, clear and complete throughout. Sometimes the Phœnician letters, having been merely scratched on the hard surface of the baked tablet, are so faint that it is impossible to trace them with any certainty. Sometimes the Cuneiform letters are partially obliterated by time or friction. Again, it is often a matter of great difficulty to identify the Cuneiform words which answer to the Phœnician dockets, and lastly, where the identification is established, we are not unfrequently disappointed of a full comparison owing to the mutilated condition of the tablets. Still, with all these drawbacks, there are a few well determined bilingual readings, and these I now propose to consider in due order, referring the reader to the annexed plates, 1, 2, 3, & 4, for fac similes of the Phœnician legends, and making use of the corresponding Hebrew letters in explaining the meaning of the dockets.³

² The contents of the legal tablets of Assyria and Babylonia will form the subject of a second paper, which I propose to publish in the next volume of the *Society's Journal*. I have succeeded in copying and deciphering about 100 of these documents and have thus obtained materials for a very extensive comparison and analysis.





³ After completing my examination of these bilingual legends, I obtained access to Dr. Levy's "*Phœnische Studien*" and found that a certain number of the Museum tablets upon which I had been engaged had already passed through his hands. As my readings, however, of the Phœnician legends, in

I.

This tablet is a favourable specimen of the class ; it is quite perfect, and the Cuneiform writing is legible throughout. It registers, with the usual formalities of transfer, the sale of a slave girl named , *Arba-il-Khirat*, the seller being a certain *Bil-akhisu*, son of *Merodach-abúa*, and the buyer being an officer of the prince's court, named *Kizir-Asshur*. The price paid for this female slave was one "mina" and two-thirds (?) of silver, which is somewhat above the average valuation.

On the margin of the tablet is the Phœnician legend דנת ארבלהר, *danat Arbîl-hira*, written evidently with the point of a "stylus," while the clay was yet moist ; and legible with certainty, excepting in regard to a single letter. The "giving up" or "surrender" of property, which constitutes the first condition of a sale, is always represented in these legal documents by some derivative from the Assyrian root *nadan*, "to give," answering to the Hebrew root נתן, which is sometimes used in the same sense (compare Prov. xxxi. 24), and the term *danat*, "gift," or "sale," which occurs in the marginal legend, is the Phœnician equivalent.⁴















every instance but one, differed from his, and as he had left almost untouched the comparative branch of the inquiry, I did not find it necessary to disturb the text of my paper. I shall, however, append a few notes, where his proposed readings seem to require them.























⁴ The particular word used is *Tadáni*, which is usually written , or , and of which I consider the grammatical condition to be exceedingly obscure. *Primâ facie*, I should take *Tadáni* to be the 3rd pers. sing. fem. of the aorist of *Kal* (like , *tasatthiri*, "she writes ;" , *tagabbí*, "she says," &c. ; but in the phrases where the word occurs there is no possible feminine nominative. It is not less difficult to explain *Tadáni* as the 2nd pers. sing. of a verb, and I am led, therefore,—notwithstanding its strange appearance, and the somewhat forced construction that such an explanation involves,—to suggest that it may be a verbal noun, thus corresponding with *danat*, both in derivation and in condition. The regular formula, as observed in this contract (and in all others of the same class), commences as follows, "The seal of "*Bel-akhisu*, son of *Merodach-abua*, ownership of a woman surrenders" (or "thou dost surrender" *tadáni*).




















(Impression of his seal, three times repeated) :—






"(Namely) the woman *Arba-il-Khirat*, the female slave of *Bel-akhisu*, "and becomes (the owner) *Kizir-Asshur*, chamberlain of the king's son. For "1½ mans of silver from *Bel-akhisu* he takes her, &c., &c., &c."












The peculiarities both of orthography and construction in these declarations of contract will be fully analyzed in the second part of this paper, and I hope, also, to be able to publish the original inscriptions, or at any rate selected specimens of each class, in a future volume of the British Museum Cuneiform texts.


With regard to the exact reading of the name of the slave girl, whose sale is here registered, there is some difficulty, owing to the doubtful form of the fifth Phœnician letter, and the polyphone value of its Cuneiform correspondent. The term   is well known from many examples to signify "a woman," or "wife" (Comp. Black Obelisk Ins. face A, line 12; Michaux's Stone, col. 4, l. 5, &c., &c.); but the pronunciation of the word might be *khirat*, or *zirat*, or *thirat*, according as we gave to the letter  its normal power of *khi*, or adopted one of its secondary values, *zi* or *thi*, the former occurring in the names of Rezin and Tiglath-Pileser^a (and in derivatives from  , &c.), and the latter in the oblique case of Ararat,^b in derivatives from the root   , and in the common form   , *akthirib*, "I approached." It adds also considerably to our difficulty that both *zirat* and *thirat* might be etymologically explained as applying to "a woman,"^c and that the Phœnician letter, again, which answers to  in the word in question, might be compared both with the Numismatic *Tsadé*  (see Gesenius Mon. Phœn. vol. ii. pl. 3^d), and with the Palmyrene or Parthian *Daleth*, . On a fair review,




^a In the Cuneiform                      

however, of all the evidence, I prefer reading   as *khirt*, and its Phœnician correspondent as , *Hira*;⁹ comparing the noun either with the Hebrew , which signifies "a pregnant woman," or, as is more probable, with the common word , which, although now unknown to the Arabic in that sense, must certainly be of Semitic origin, and which is still used as the ordinary term for "a woman" in Turkey, in Persia, and in India. The chief reason which I have for this reading is, that I find in the vocabularies relating to "women"    *khirtú* connected with   , *khairu*, as    *askatu*; in the same sense () is with   *ishu*. If the Hebrew , "to conceive," be the root from which this noun is derived, the Phœnician orthography which uses the soft instead of the hard guttural will be more correct than the Cuneiform, and the lapse of the feminine ending also in the nominative case is quite in consonance with the popular pronunciation. I think it more probable, however, that *khirat* is the same as , from whatever root that term may be derived,¹⁰ and that the Phœnician *hira* may thus mark the passage of the hard guttural to the *y*.

The other element of the name in question,  , in Assyrian, and , or , in Phœnician, is the famous city of Arbela. This name is always represented in Assyrian by two signs, the first, , being composed of four elements, and thus having the power of *arba*, which signifies "four" in all the Semitic

reproduced the form of the character as seen upon the tablet. I also remark that he gives the first word of the legend as , *rakat*, instead of , *danat*; the latter reading, however, is undoubted. I know not from what source he obtained his reading of *rak arrabil Assar* for the corresponding Assyrian     (), but no Cuneiform scholar will, I venture to say, support that reading—although the letters certainly have the powers assigned to them—against my explanation of , determinative of woman, and unpronounced,  , name of the town of Arbil, and , part of "*Khirat*," "a wife or woman."

⁹ Compare the two last variants given for the , in Gesenius's *Mon. Phœn.* vol. ii. pl. 1, which resemble, at any rate, if they are not identical with, the form upon the tablet.

¹⁰  may be supposed to come from the root , "to be naked," whence the Hebrew has , "pudenda," but it is not used in the sense of "a woman" either in Hebrew, or Aramaic, or Arabic.

With regard to the city of Arbela, from which the name was derived, we have more precise information. This city was probably one of the earliest founded in Assyria, for $\chi\alpha\lambda\alpha\sigma$ and Ἀραβηλός are placed by Abydenus among the progenitors of Ninus, in deference, as it would seem, to some early tradition that Culah and Arbil were older cities than Nineveh.¹⁵ The Talmudists, indeed, had a fable that the Patriarch Seth was buried at Arbela,¹⁶ and the place seems to have preserved its sepulchral, or funereal, character, through the whole period of its history; for we find it constantly selected by the Assyrian kings as the scene of execution of distinguished captives,¹⁷ and in a later age the Parthian monarchs are

probably to the same system of notation which employed *Rē* for 20, *Rag* for 30, *Raz* for 100, &c. (see Zend Avesta, tom. ii. p. 523): though why "the great goddess," who had no apparent connexion with the full moon, should have been thus typified, I cannot venture to conjecture.

¹⁵ Arbēlus is twice mentioned in the mythic genealogy of Ninus, preserved by Abydenus, as if there was both an older and a later city of Arbil. The other names occurring in this list, which probably comes originally from Berosus, are also suggestive. *Anebū* must be, I think, the Median *Anub*, "a god," and the name of Babus, who was the immediate descendant of Belus, would seem to allude to the same myth of "the gate (of life)," which originated the name of Derecto, or Atargatis (תרעת from תרע , "a gate"), and which was perpetuated in the name of that goddess's dwelling place, 𐤠𐤏𐤃𐤁𐤏𐤕𐤌 , *Dan-ur* ("Life's gate?"), or *Bab-il*, "the gate of god," or Babylon. For the extract from Abydenus, see Aucher's Eusebius, vol. i. p. 78, and Mos Chor. lib. i. cap. 4.

¹⁶ I gather this from Schindler's Pentaglot, col. 144, but I have not found the passage in any Talmudic tract. At present the tomb of Seth is to be seen in the town of Mosul, and the veneration with which the spot is regarded is due, no doubt, to the influence of the Sabæan school of northern Mesopotamia, which adopted from the early Christians so many of the Hebrew patriarchs, and paid a special respect to Seth, as the inventor of astrology and letters (see Rezan: Nabathæan Agriculture, Eng. edit. p. 53), but it is possible that the name, or one nearly similar, may have been known in the country from the very remotest antiquity, for the earliest form under which the god *Ashur* is named in the inscriptions (see Rawlinson's Ins. pl. 6, No. 1) is 𐤠𐤏𐤃𐤁𐤏𐤕𐤌 , which we are authorized by the Syllabary, No. 145, to read as *Ashal* (𐤠𐤏𐤃𐤁𐤏𐤕𐤌 being equal to 𐤠𐤏𐤃𐤁𐤏𐤕𐤌), a very close approximation to the *Ishlthā*, إشيثا , of the Sabæans, and as the same orthography is also given in the vocabularies as a variant for the country of Assyria, we may thus perhaps arrive at the origin of 𐤠𐤏𐤃𐤁𐤏𐤕𐤌 , *Ashur*, which is substituted for 𐤠𐤏𐤃𐤁𐤏𐤕𐤌 in the Samaritan version of the Pentateuch (see Rawlinson's Herodotus, vol. i. p. 588).

¹⁷ The first mention of an execution at Arbela occurs in the annals of *Ashur-izir-pal* (Rawlinson's Ins. pl. 18, l. 68), where, however, in the translation furnished to Layard by Dr. Hincks, the name of Babel is strangely enough substituted (Nineveh and Babylon, p. 353). In the annals of *Ashur-bani-pal* there are several similar notices, and finally, in the fourteenth para-

said to have been still interred there.¹⁸ I am further inclined to think that Arbela must have been the scene of some great slaughter in the wars of succession which devastated Assyria between the close of the reign of Tiglath Pileser II. and the accession of Sargon, for I cannot admit any other explanation of the famous passage in Hosea x. 14.¹⁹

In later history Arbela was celebrated as the chief city in the neighbourhood of the great battle field where Darius lost the empire of Asia to Alexander;²⁰ and we may infer from a notice in Strabo that the Macedonian conqueror gave the name of Nicatorium to the

graph of the second column of the great inscription of Bihestun, Darius relates how he crucified the rebel Sitratachmes at Arbela, after defeating him in the distant province of Sagartia.

¹⁸ Dion Cassius, at the commencement of his 78th Book, describes how Caracallus, in his Eastern war, destroyed the tombs of the Parthian kings at Arbela, and scattered their bones abroad. Several royal tombs of the same period were opened by me in the centre of the Koyunjik mound, but the occupants—from the necklaces, ear-rings, bracelets, and other gold ornaments, which were found with the remains, and which are now in the British Museum—appeared to have been exclusively female. Could it have been possible that the Parthian kings were buried in one place and their queens in another?

¹⁹ "And all thy fortresses shall be spoiled, as Shalman spoiled Beth Arbel in the day of battle; the mother was dashed in pieces upon her children." The prophet here evidently alludes to some well known contemporaneous exploit; and the reign of Shalmaneser, which is determined by the canon to have lasted from B.C. 726 to 721, will thus exactly suit. It has been customary to compare **בֵּית אַרְבֵּל** with the *Ἀρβηλα* of Galilee, mentioned in 1 Macc. ix. 2; but if there had been any great slaughter in the north of Palestine during either of the expeditions of Shalmaneser against Hoshea, this would hardly have been the only allusion in Scripture to such an event.

I may here add that a powerful corroboration of the truth of the historical scheme which assigns to the Biblical Shalmaneser the five years intervening in the canon between the reigns of Tiglath Pileser and Sargon, is to be found on the lion weights from Nineveh (now in the British Museum), which are marked respectively with the names of Tiglath Pileser, Shalmaneser (**𐎶 𐎵 𐎶 𐎶 𐎶**), Sargon, and Sennacherib, evidently in a continuous chronological series; and that a similar inference is to be drawn from a clay tablet in the British Museum, which is dated from some year of the king, **𐎶 𐎵 𐎶 𐎶 𐎶 𐎶 𐎶 𐎶 𐎶 𐎶**, and which to all appearance is of the same age as the tablets dated from the Eponyms under Tiglath Pileser and Sargon.

²⁰ In actual distance Arbela was hardly nearer to the scene of battle than was Nineveh itself, or Caleh; but it was probably the only one of the great Assyrian cities which was inhabited in the time of Alexander, its sacred character having preserved it amid the revolutions which had desolated its sister capitals. The nearest city to the field of battle must have been that of which the site is now marked by the ruins of Karamlis; the Assyrian name of this city being **𐎶 𐎵 𐎶 𐎶 𐎶 𐎶 𐎶 𐎶 𐎶 𐎶**, and the Mahomedan title **بلا بادن**, *Belábádh*, as if the group **𐎶 𐎵 𐎶 𐎶 𐎶 𐎶 𐎶 𐎶 𐎶 𐎶** (of very rare occurrence) represented the god Bel.

old Assyrian mound, to commemorate his victory,²¹ a circumstance which probably caused the city to be called Alexandriana, under the Sassanian dynasty of Persia.²² The great mound of Arbela must have been a kindred work to those other artificial constructions at Koyunjik and Nimrud, though perhaps of larger dimensions. It exhibits at the present day,—as far, at any rate, as concerns the height of the mound, the steep slope, and the well preserved continuous crest,—very much the appearance which the platform of the great palace of Nineveh must have presented in the age of Sennacherib, and it is hardly to be doubted that whenever the Turkish fort which now crowns the acclivity shall be removed, and facilities shall be thus afforded for running trenches and galleries into the mound, a harvest of antiquities will reward the excavator, fully equal to the treasures of Koyunjik and Nimrud.²³

The name of Arbela seems to have been a very favourite element in Assyrian names, for besides the present name of *Arba-il-khirat*, we have upon other tablets :—

𐎶 𐎠𐎼𐎶 𐎠𐎶𐎵 𐎠𐎶𐎵 𐎠𐎶𐎵 𐎠𐎶𐎵 𐎠𐎶𐎵, *Mannuki-Arba-il*.

𐎶 𐎠𐎶𐎵 𐎠𐎶𐎵 𐎠𐎶𐎵 𐎠𐎶𐎵 𐎠𐎶𐎵, *Arba-ilai*.

𐎶 𐎠𐎶𐎵 𐎠𐎶𐎵 𐎠𐎶𐎵 𐎠𐎶𐎵 𐎠𐎶𐎵, *Paga-ana-Arba-il*.

𐎶 𐎠𐎶𐎵 𐎠𐎶𐎵 𐎠𐎶𐎵 𐎠𐎶𐎵 𐎠𐎶𐎵, *Papaqa-ana-Arba-il, &c.*

It need only further be stated, that the Phœnician legend on this tablet is evidently of the same age as the Cuneiform writing, and that it may be positively assigned, therefore, to the middle of the seventh century B.C., the document being dated from the Eponymy of 𐎶 𐎠𐎼𐎶 𐎠𐎶𐎵, *Sin shar-uzur*, towards the close of the reign of *Asshur-bani-pal*.

²¹ The Mount Nicætorium is joined with Arbela by Strabo (p. 738), as if they were the same place; and indeed, there is nothing in the vicinity deserving of the name of a hill, except the old Assyrian mound. Strabo farther calls Arbela, who founded the city, *τοῦ Ἀδριαῖου*, in which name we may perhaps recognize Esinun or Escalapius, who was also adopted, like Seth, into the religious system of the Sabæans, and therein plays a most conspicuous part (see Renou's *Nabathæan Agriculture*, p. 41).

²² Theophyl. Sim. lib. v. cap. 7, *ad finem*.

²³ Rich estimated the height of the mound at 150 feet, and its diameter at 300 or 400 yards (*Rich's Kurdistan*, vol. ii. p. 17). He also learnt that an ancient sepulchre had been opened in the mound shortly before his visit, which contained a bolt evidently from the description similar to those since discovered at Koyunjik. On several occasions I have searched for bronzes and objects of antiquity, on the slope of the mound, but have been unsuccessful in finding anything, as the place is densely inhabited, and anything, therefore, which is exposed to view is instantly carried off.

No. 2

The Phœnician legend in No. 2 tablet has been already partially published by Mr. Layard (*Babylon and Nineveh*, edit. of 1853, p. 346), but the Cuneiform text is not there given with sufficient distinctness to admit of a comparison between the two writings. The tablet, however, is quite perfect, and succinctly records the sale of a batch of slaves by their owner, $\text{𐤀𐤭𐤌𐤌𐤀} \text{ 𐤀𐤭𐤌𐤌𐤀} \text{ 𐤀𐤭𐤌𐤌𐤀} \text{ 𐤀𐤭𐤌𐤌𐤀} \text{ 𐤀𐤭𐤌𐤌𐤀}$, for the amount of three minas of silver. The slaves are thus enumerated:—*Assur's* and his two women, *Mikā* and *Badiā*;—together with two men, *Sinā* and *Jas-agga*, and two young daughters, making in all seven persons.* With regard to the Phœnician script, I have been long in doubt as to its application. The first line, which is alone given in Layard's plate, and which covers the margin of one side of the tablet, may be read quite certainly as $\text{𐤀𐤭𐤌𐤌𐤀} \text{ 𐤀𐤭𐤌𐤌𐤀}$, corresponding with $\text{𐤀𐤭𐤌𐤌𐤀} \text{ 𐤀𐤭𐤌𐤌𐤀}$ of the Cuneiform text, "the survivor" or "side" of *Assur* (Hathor)†; but I have long been in doubt whether the remainder of the Phœnician legend, which is written along another side of the tablet, embodies the names of

* The exact character is not given in any of the alphabets of Gesenius as being a Phœnician letter, but the form is nevertheless well known to the student of the Phœnician script. Another example of it occurs in the Phœnician text of the tablet No. 1, p. 187. I have recently seen a Phœnician tablet, which appears to be a duplicate of the Phœnician Museum, in which the same character is used. The Phœnician legend seems to be a Phœnician version of the Cuneiform text. *Assur-Hathor* for *Assur's* is a very doubtful form.

† The Phœnician character is not given in any of the alphabets of Gesenius as being a Phœnician letter, but the form is nevertheless well known to the student of the Phœnician script. Another example of it occurs in the Phœnician text of the tablet No. 1, p. 187. I have recently seen a Phœnician tablet, which appears to be a duplicate of the Phœnician Museum, in which the same character is used. The Phœnician legend seems to be a Phœnician version of the Cuneiform text. *Assur-Hathor* for *Assur's* is a very doubtful form.

ples to have had the phonetic value of *ardu*.²⁸ Its Semitic relationship is not apparent, unless, indeed, it be derived from the root ארד, "to tread upon," but it must have been very extensively employed in Assyrian nomenclature, and it is exactly represented by the Phœnician ארד.

The phonetic reading of the second element, ארד < ארד, which was one of the names of "the Great Goddess" who presided over Nineveh, is a more difficult matter, and has long been, in fact, one of the most important, as well as the most hopeless, of the desiderata of Cuneiform decipherment. I cannot say, indeed, even now, that the problem is definitively solved, for although we have three names in which this element occurs, represented in Phœnician as well as in Cuneiform, there is unfortunately some weak point in each of the three examples. Here the Phœnician character—the last in the line—which should answer to the name of the goddess, is imperfect, and although I do not think it can be anything but a *shin*, ש, still I cannot be quite certain of the fact. If I am right, however, in reading ארדש as the equivalent of ארד ארד ארד < ארד, then it follows that we must consider "the Great Goddess" to have had in Assyria the vernacular title of אשה, *Asha* or *Ashat*, "the woman," *par excellence*;²⁹ and in this view we may go on, perhaps, to explain the title of 'Aδá, which Hesychius gives to the

²⁸ That ארד signified "a slave," and was pronounced *ardu* (or in composition *arad*), there is no doubt whatever; but the employment of the monogram in the compound epithet ארד ארד, which was a title frequently assumed by the Assyrian kings, and especially in reference to Babylonia, is not quite so easily explained. I believe, however, that it means "reducing to slavery," or "putting on the yoke of slavery," though I cannot give with any certainty its phonetic equivalent. (Compare the Khursabad passages, pl. 152, 3, 12, with 95, 6, and also 145, 3, 12; 151, 10, 9, and 123, 16).

I would also suggest that the biblical name of ארדמלך, applied to a son of Sennacherib's, which has positively no meaning in Assyrian, is an error of the copyist for ארדמלך, *Ardu-malik* (equivalent to the Hebrew *Ebed-Melek*, "servant of the king"); but it is singular that we have not more examples from the Greek and Hebrew of the employment of the word *ardu* in Assyrian names.

²⁹ The Assyrian phonetic term for "a woman," ארד ארד ארד, is not, however, as far as I have observed, ever applied as a name to the goddess in question, nor is its Proto-Chaldæan equivalent, ארד ארד (pronounced *dam*; compare *dame*, &c.) ever used in connection with the great goddess, except to express her relationship to ארד ארד.

Babylonian Juno,³⁰ by 𐎶𐎵𐎶, the Chaldean equivalent of 𐎶𐎶𐎶. I have no confirmation, it is true, of this phonetic reading of *Asha* or *Ashat*, for the Assyrian "Mother of the Gods," from any Greek or Biblical name, nor does such a reading explain in any way the goddess's titles of 𐎶𐎶 and 𐎶𐎶𐎶; but, on the other hand, there are, as will presently be seen, two more independent bilingual readings which give the same result, and it is further evident that a name signifying "the woman" would be sufficiently appropriate, more especially when the standard title by which she is known, 𐎶𐎶 𐎶𐎶𐎶 𐎶𐎶𐎶, may be also shown to mean "the lady."³¹ It would have been more regular, of course, had the Phœnician name been written with an aleph, 𐎶, so as to distinguish between the two elements composing it, *arad*, "a slave," and *Asha*, "Beltis;" but many similar contractions and omissions will be observed as we proceed with our analysis, and in the present case there was positively no room on the tablet for an extra letter.

I will now consider the alternative reading which would recognise the names of the other two male slaves in these obscure Phœnician characters. The blank space at the end of the first line contained probably the mere point of division, and the two signs which commence the second line may, thus, perhaps have been intended for the name of *Siga*, or *Sigu*, contracted from the Cuneiform 𐎶𐎶 𐎶𐎶 𐎶𐎶 *Sigabâ*, or *Sigvâ*, and derived either from 𐎶𐎶, "to be high," or 𐎶𐎶, "to be great." This assimilation, though not wholly satisfactory, might perhaps be accepted, but the difficulty in regard to the second word is, I fear, insurmountable. The Cuneiform name which follows that of *Sigubâ* is composed of

³⁰ 'Αδά . . . ὑπὸ Βαβυλωνίων ἢ "Ηρα, Herych. in Vore












³¹ Dr Hincks, in one of his recent papers (Journal of Sac. Lit. No. xxviii. p. 405), has hazarded the bold hypothesis that 𐎶𐎶 𐎶𐎶𐎶 𐎶𐎶𐎶 is to be pronounced *Binhil-ghiti*, and that it signifies "the lady of blood (or slaughter)." Now, a very slight acquaintance with the Proto-Chaldean language, to which all these divine names belong, is sufficient to show that 𐎶𐎶𐎶 (pronounced *gê*, 𐎶𐎶𐎶 𐎶𐎶, see Syllabary, No. 366) is a mere grammatical suffix, used apparently like the terminal guttural of the Basque, and that 𐎶𐎶 𐎶𐎶𐎶 𐎶𐎶𐎶 and 𐎶𐎶 𐎶𐎶𐎶 𐎶𐎶𐎶, therefore, however they may have been pronounced in Assyrian, signify probably "the Lord," and "the Lady." Dr Hincks has also suggested in the same place that the god *Bil zirbu* is identical with 𐎶𐎶 𐎶𐎶𐎶, but there is not the least authority for this. On the contrary, *Bil zirbu* is a God very little known, and only worshipped, as far as I have seen, in the Arabian district of Bas






two elements, namely, the God $\text{𐎶𐎵} \text{𐎶}$, and the verbal adjunct $\text{𐎶𐎵} \text{𐎶}$. Now it is very possible, and even probable, that the signs $\text{𐎶𐎵} \text{𐎶}$ do really represent the name of the God *Anu*; for although such an epithet is not found in any list of synonyms for this deity, still I think we may read the signs as *Huras*,³² and this is actually the pronunciation given repeatedly in the bilingual vocabularies to the sign 𐎶𐎵 , which seems to have been one of the epithets by which *Anu* was distinguished. It remains then to consider the second element $\text{𐎶𐎵} \text{𐎶}$, and here I am bound to admit the comparison altogether fails us. These two signs, when considered as ideographs, mean probably "the stone which appoints," and are thus used for "a seal," which in the language of Assyria was named *kanuk*;³³ but the same signs












³² That is, the sign 𐎶𐎵 , in its signification of "a lord," interchanges frequently with 𐎶 , which again appears to be the same title as $\text{𐎶𐎵𐎶} = \text{𐎶}$, a term that is often used to indicate royalty in the Proto-Chaldean inscriptions (compare Rawlinson's Ins. pl. 3, No. 9, l. 7; No. 10, l. 12; pl. 5, No. 16, l. 5; and No. 20, l. 3, &c.). One of the possible values of 𐎶𐎵 might thus be *hu*; and 𐎶 is well known to be either *ras* or *kas*, the former power being the Turanian equivalent of *kharan*, "a road," and thus standing sometimes for the city of Harran. *Ras* itself would seem to be connected with the Persian راه , *rah*, "a road;" *ras-īdan*, "to arrive," &c., &c.





















It is doubtful, however, if the title of $\text{𐎶𐎵} \text{𐎶𐎵}$, which is generally accompanied in the bilingual lists with the gloss of $\text{𐎶𐎵𐎶} = \text{𐎶𐎵} \text{𐎶}$, apply properly to the god *Anu*, or to Hercules ($\text{𐎶𐎵} \text{𐎶}$). It occurs in the lists of epithets applying to each of these gods, and even in reference to the city of $\text{𐎶𐎵} \text{𐎶𐎵}$,—which was the special seat of the god $\text{𐎶𐎵} \text{𐎶𐎵}$ (see Rawlinson's Ins. pl. 65, col. 2, l. 46), and which would appear to be the *Dubana* of Behistun (col. 3, l. 78), as its temple is named $\text{𐎶𐎵} \text{𐎶𐎵}$ $\text{𐎶𐎵} \text{𐎶𐎵}$ in the geographical catalogues—although Hercules, or $\text{𐎶𐎵} \text{𐎶𐎵}$, is given as the tutelar divinity of the place, the temple which it contained, and which was repaired by Nebuchadnezzar (in loc. cit.), has the title of $\text{𐎶𐎵} \text{𐎶𐎵} \text{𐎶𐎵} \text{𐎶𐎵}$ $\text{𐎶𐎵} \text{𐎶𐎵}$, where we recognize the name of *Anu*. (This is a mistake. Hercules was the god of Niffer, or $\text{𐎶𐎵} \text{𐎶𐎵}$ 𐎶𐎵 ; but $\text{𐎶𐎵} \text{𐎶𐎵}$ is alone mentioned as the god of $\text{𐎶𐎵} \text{𐎶𐎵}$).

³³ 𐎶𐎵 is used with a great variety both of powers and meanings. One of its most common employments, however, is to represent the root מנה , "to count or appoint" (see Syllabary, No. 371, for the noun $\text{𐎶𐎵} \text{𐎶𐎵}$),

are also constantly found in proper names with phonetic powers, representing the root *tagal*, "to serve," or "be attached to," the three forms of   ,  , and  , being used indifferently,²⁴ and by no possible manipulation can I torture the three Phœnician signs which in the legend follow  into any word at all resembling in sound *taggal* or *taggil*. If these signs are really alphabetic rather than numerals, they must, it would seem, represent a *Shin*, a *Caph*, and a *Kheth*, and the name would thus read   , *Anu-shekah*, instead of *Anu-taggil*.²⁵ It is, then, the

"counting"), and this appears to me to be the meaning which it conveys, in connection with  , "a stone," as applied to a signet seal. Mr. Fox Talbot explains    as "the talking stone," but I know not on what authority.

²⁴ One of the most perplexing features in Cuneiform writing is the admixture of ideographic and phonetic expression, of which we see an example in this word. The group   , as applied to a seal, is purely ideographic,  being "a stone;" in Assyrian, *abnu*, for , and , as I have already explained, representing perhaps the root , "to count," but both of these characters have, of course, phonetic powers in Turanian, the former being *lak* or *tag* (allied, as I think, to the Turkish *tash* and *tagh*), and the latter sometimes—but very rarely—standing for *gil*. It is then fore possible that a signet seal in Turanian may have been named *tag-gil* (with which I would compare "sigillum," the *t* and *s* interchanging, as is usual in Chaldeæ and Hebrew), and may thus very properly have been used for the Assyrian root *tagal* or *tagal*, "to serve," although there was another ideograph, , especially assigned to that root, because in some primitive dialect *ku* had the same signification. At any rate, from the variant readings in different copies of the Assyrian canon, there can be no doubt that    in proper names does not indicate "a seal," as Mons. Oppert supposes, giving it the power of "*kounouk*," but that it is used phonetically for the root *tagal* or *tagal*.

I may give another instance of the manner in which the old Turanian powers were sometimes utilized in Assyrian, in the compound ideograph                    

impossibility of reconciling these two readings which has decided me in favour of the other explanation, weak and insufficient as it is.

No. 3.

This is a mere fragment registering the sale of a batch of slaves, one male and two of his female relatives, by a man of the name of *Khudai* to another called *Ninuai*. The name of the male slave, which is alone specified, is unfortunately defective both in the Cuneiform and the Phœnician text, the beginning of the name being lost in the one, and the end in the other. Our list of proper names is now so large, numbering above a thousand, that in most cases we can restore a defective word from other examples with much probability; but I doubt if there is a second mention of this name on any of the tablets. The commencement of the name, it is true, in the Phœnician text, resembles much the month of אלול, *Elul*, and there are actually two months of the Assyrian Calendar, 𐎶𐎵 and 𐎶𐎶, which seem to have been extensively used in the nomenclature of Nineveh, the former, moreover, being the sixth month of the Assyrian Calendar, and thus corresponding in place with the Hebrew *Elul*;³⁶ but I have never found the second element, *khazzi*, in composition, with either the month 𐎶𐎵 or 𐎶𐎶, nor indeed with any other ordinary Assyrian noun, and I cannot venture therefore to give the Cuneiform equivalent of אלול. With regard also to this second element, it is not quite certain that *khazzi* is the true form. In the Phœnician text a *Kheth*, כ, appears after *Alal*, and in the Cuneiform we have the two concluding letters, 𐎶𐎶𐎵 > 𐎶𐎶𐎵, *azzi*; but there is no direct proof that the three letters form one word. If *Alal-khazzi* be, however, the true reading of the slave's name, we must suppose it to be a kindred compound with *Yahu-khazi*, which was the Assyrian orthography

and the whole argument in favour of the name of *Asha*, for 𐎶𐎶𐎵 < 𐎶𐎶𐎵, would fall to the ground. I do not, however, think it possible that the last Phœnician letter can be a *Nun*, נ.

³⁶ I shall consider in another place whether the Assyrian year commenced with the vernal or autumnal equinox. Mons. Oppert adopts the former calculation, in opposition to the later Syrian calender, and he thus without hesitation reads the name of 𐎶 𐎶𐎶𐎵 𐎶𐎵 𐎶𐎵 as *Illoulai*. This may be correct, but requires confirmation. At any rate, the Ilulæus of Tyre can hardly be connected with the month of Elul, since the name is written as 𐎶 𐎶𐎵 > 𐎶𐎶𐎵 𐎶𐎶𐎵, in the Sennacherib annals; and it is very doubtful if the Ἰλούλαιοις of the canon of Ptolemy be a genuine orthography.

much of the variation in orthography from the form of 𐤅𐤍 , which is used in No. 14, and 𐤅 in No. 2; for the name, it must be remembered, was foreign to the Phœnicians, and the Assyrians in their pronunciation seem to have hardly distinguished between the *Ain* and the *Aleph*;³⁸ and there is, moreover, an exactly analogous instance of corruption in the Hebrew עִשְׁתָּרֹת for the Assyrian 𐤅𐤍 𐤅𐤍 , *Ishtar*.

The second and third elements of the slave's name are clear and certain as to their pronunciation, though some doubt may attach to their meaning. The Cuneiform 𐤅𐤍 𐤅𐤍 is everywhere in the vocabularies explained by 𐤅𐤍 𐤅𐤍 , *Duru*, and there can be no doubt therefore as to its meaning or pronunciation. It is used in geographical names precisely as the Arabic دور , and is applied to any fortress or place of defence, signifying originally, as it would seem, "a circular enclosure," whether for a camp or town.³⁹ The third element is not so easy of explanation. The Cuneiform 𐤅𐤍 𐤅𐤍 𐤅𐤍 is very correctly represented by the Phœnician 𐤅𐤍 𐤅𐤍 𐤅𐤍 , pronounced probably as *qali*, but the meaning is doubtful. As I observe, however, in a nominal roll where the most ordinary Assyrian titles are classified according to their composition and etymology, that the name of *Nabu-dur-qala* is bracketed with *Nabu-dur-irisu*, I conceive they must be of kindred signification, and would propose therefore to compare *qala* with قلع , "a fort," as 𐤅𐤍 𐤅𐤍 certainly answers to 𐤅𐤍 , the meaning of the respective names in the nominal roll being "Nabu is the defence of the fortress," and "Nabu is the defence of his city." It must be observed, at the same time, that this lapse of the final *Ain* is hardly permissible, and that there are no other examples that I am aware of

³⁸ Dr. Levy, I observe, in his vocabulary (*Phönizisches Wörterbuch*, p. 8), under the head of 𐤅𐤍 , "a woman," gives an example from Gesenius of the variant Phœnician reading of עִשְׁתָּר , which is exactly applicable to the present passage.

³⁹ Mons. Oppert, I believe, to the present day, reads 𐤅𐤍 𐤅𐤍 as *Hisir*, and Mr. Fox Talbot adheres to the old reading of *Kara*, which Dr. Hincks first suggested when he fancied that the sign answered to the phonetic word 𐤅𐤍 𐤅𐤍 , in the great Nebuchadnezzar Ins. col. 5, ls. 2, 5, &c. I have, however, at least twenty examples of the reading of *Dur* for the sign in question, and have thus phonetically rendered the character in all my translations for the last ten years. The only doubt I have is whether 𐤅𐤍 𐤅𐤍 is not sometimes used as a verb as well as a noun, answering, in fact, to the root דור , as well as to the term דור , in which case it might be optionally sounded as *iddur*, *vadur*, &c.

in the inscriptions of the employment of the Arabic قلعة for "a fortress," so that the meaning of "Asha defends the fort," for *Asha-dur-gala*, can only be received provisionally.

The tablet in question dates from the Eponymy of *Sim-shar-usur*, about B.C. 650.

No. 5.

The broken tablet on which this legend is found registers the sale of a field for a *sinab* (or two-thirds of a mina) and four shekels of silver,³⁹ the Cuneiform name of the seller being $\text{𐎶} \text{𐎶} \text{𐎶} \text{𐎶}$, and of the buyer, $\text{𐎶} \text{𐎶} \text{𐎶} \text{𐎶}$, neither of which names, however, can be rendered phonetically with any certainty. The first line of the Phœnician docket is simply דגת חקל, "the sale of the field," answering to the Cuneiform $\text{𐎶} \text{𐎶} \text{𐎶} \text{𐎶}$, and the second line ought therefore, as it would seem, to give the name of the owner of the property; but I have quite failed to make out an equivalent reading. The beginning, indeed, of the second Phœnician line is altogether illegible, and the continuation זרדד, *zardd*, bears no resemblance that I can discover to the Cuneiform $\text{𐎶} \text{𐎶} \text{𐎶} \text{𐎶}$.

חקל, in the first line, for the Cuneiform $\text{𐎶} \text{𐎶} \text{𐎶} \text{𐎶}$, is a reading of some interest. I have long been acquainted with the meaning of the term, from having observed that it was used as a substitute for $\text{𐎶} \text{𐎶} \text{𐎶}$, *niggar*, "land," but both Monsieur Oppert and Mr. Talbot have misunderstood it, and have sadly disfigured some important passages in consequence.⁴⁰ The term $\text{𐎶} \text{𐎶} \text{𐎶} \text{𐎶}$ itself is

[³⁹ The identification of the *sinab*, equivalent to two-thirds of the *manah*, is a new discovery. The Assyrian signs indicating this weight are 𐎶 and 𐎶 , both of which are given on the Lion in the Museum Collection, No. 9, where we have also the Phœnician reading of 𐎶 . The Assyrian equivalent of 𐎶 is given in the Syllabary as $\text{𐎶} \text{𐎶} \text{𐎶} \text{𐎶}$, *sinabu*].

⁴⁰ There are three very innocent lines in the great Khorsabad inscription of Sargôn relating to the means by which the king obtained the lands required for the building of the city, which lines the lively imaginations of Mons. Oppert and Mr. Fox Talbot have converted into the most important historical data, the French savant drawing from them an explanation of the name of *Sargina* (Sargôn) while Mr. Talbot thinks they prove the antiquity of coined money.

The translations of these gentlemen are as follows:—

"Car les grands dieux m'ont nommé *sinai* (Sarkin), parce que j'ai observé
" les traités et la loi jurée parce que j'ai gouverné sans injustice et sans opprimer
" les faibles. J'ai présenté aux chefs de la ville les constitutions écrites de la
" cité, d'après les tables de la vérité, gravées sur argent et sur airain. Je leur
" ai donné ensuite les explications indispensables sur la loi, sans arbitraire, la
" loi de la justice, la loi qui les dirige dans leurs actions." (Les Inscriptions Assyriennes des Sargonides, p. 38)

Turanian, and it is doubtful how it was pronounced ; its Assyrian equivalent, however, is everywhere given as 𐎶𐎵 𐎶𐎵 𐎶𐎵 𐎶𐎵, *eqil*, which exactly corresponds with the Chaldee 𐤒𐤍, and Syrian

The English rendering is :—

“As the great gods have given renown to my name, which is triumphant and victorious, so also have they given to me the government of affairs unconnected with battle and victory. The money of the inhabitants of this city (as with unanimous voice they desired) I renewed, both in silver and copper, in accordance with their prayers. I made coins, but not of gold (which money the people did not wish for), and gave them to the inhabitants, both present and future, to be their own property.” (Trans. of Royal Soc. of Lit. vol. vii. part i. page 171.)

Now, there are several words of which I still consider the meaning to be doubtful, but the general sense, commencing from the thirty-ninth line, I take to be as follows :—

(39) *Ana susub alu sasu, zakkur parakki makhi (or ziri) adman*
In founding this city, a building glorious and exalted, temples
ill rabt va hekalt subat bilutiya, varzi va musakbud,
of the great gods, and palaces for my royalty, graciously and honourably,
azkir-va episu ikbi (40) *kima zigar sumiya,*
I constructed and I made it to be called like the saying of my own name,
sha ana nazir gitti va misharisu, sutesur la
which to the dominion of the world (?) and its government (ruling without
lihi la khabal, innimbu-inni Ill rabt. (41) *Kaship*
violence or oppression), the great gods have blazoned forth for me. The price
eqil alu sasu, ki pi duppaté sha aimanusu,
of the lands of this city, according to the tablets which secured it (or its title
kaspa va zipar, ana bilisun vatir-va; (42) *assu riggati*
deeds), (in) silver and copper, to the proprietors of them I returned, and
la rusi sha kaship eqil la zibú, eqil
in solid bullion (?) whoever the price of their lands did not wish for, lands
mikhar, eqil akhir panusun addin sunuti.
in front or lands in rear, in exchange to them I gave them.

A few notes may perhaps be required. In the first line *susub* is Shaphel of 𐎶𐎵 ; *zakkur* is evidently connected with the verb *azkir*, which follows, and probably comes from the same root as *vazakkir* in the Birs Nimrud inscription. These terms are also, I think, allied to *ziggur*, the special name of the towers attached to the Assyrian temples, but there is no cognate root with the signification of “building” in any other Semitic language. The honorary epithets 𐎶𐎵. 𐎶𐎵 formed perhaps the proper name of the tower of *Dur-Sargina*, of which the remains are now to be seen on the mound at Khursabad. The allusion in the first and second line is to the city of *Dur-Sargina* being named after the king ; not to any explanation of the king’s own name, as Mons. Oppert supposes. The idiom of the gods “blazoning forth” the name of the king to supreme power is common. The parenthetical phrase *sutesur la lihi, la khabal*, seems to have particular allusion to the justice of the king in purchasing the lands, instead of taking violent possession of them. In the third line (line 41) I am not sure whether the words “silver and copper” refer to the weight of metal given to the proprietors for their lands, or to the material of the tablets on which the title deeds were written, these title deeds being of the same class as the clay tablets and inscribed stones, which we are now discussing. Probably, however, the latter is the true application, as I have never in one single

סל, being, in fact, the same noun which occurs in the famous name 'Aac'îanâ, or "the field of blood"⁴¹

instance found copper given as a representative of value, although gold, silver, and iron are mentioned in almost every transaction of sale or barter.

It is from line 42 that Mr. Talbot draws his inference of the use of coined money, translating *raggati la rasi* as "cous. not of gold," whereas I compare $\rightarrow\leftarrow\leftarrow\leftarrow$ $\rightarrow\leftarrow\leftarrow\leftarrow$ $\rightarrow\leftarrow\leftarrow\leftarrow$ $\rightarrow\leftarrow\leftarrow\leftarrow$, not with $\rightarrow\leftarrow\leftarrow\leftarrow$, but with the Chaldee $\rightarrow\leftarrow\leftarrow\leftarrow$, which was probably in its origin an ingot of metal used instead of money, but which we translate in Prov. xvi. 11 by "a just weight;" and with regard to *rasi* (which in the Nebuchadnezzar inscription is always written with a double $\rightarrow\leftarrow\leftarrow\leftarrow$), I do not at all admit its signification of gold, but think, on the contrary, that it is a mere epithet of gold, "beaten out," so as to be laid on the walls and pillars of temples and palaces, in laminae or plates. I compare, therefore, the Syriac $\rightarrow\leftarrow\leftarrow\leftarrow$, which the dictionaries give as "contusus, percussus malleo," and suppose, in this instance, *la rasi* means merely "solid bullion;" however, I admit that the phrase is a difficult one, and have only noticed the passage to show on what slender foundations scholars like Oppert and Fox Talbot are sometimes tempted to build up important theories.

"On one of the bilingual tablets, for instance, we have the following equivalent phrases, which are interesting in many ways—

TURKISH.

$\rightarrow\leftarrow\leftarrow\leftarrow$ $\rightarrow\leftarrow\leftarrow\leftarrow$ $\rightarrow\leftarrow\leftarrow\leftarrow$ $\rightarrow\leftarrow\leftarrow\leftarrow$ $\rightarrow\leftarrow\leftarrow\leftarrow$ $\rightarrow\leftarrow\leftarrow\leftarrow$
 $\rightarrow\leftarrow\leftarrow\leftarrow$ $\rightarrow\leftarrow\leftarrow\leftarrow$ $\rightarrow\leftarrow\leftarrow\leftarrow$ $\rightarrow\leftarrow\leftarrow\leftarrow$ $\rightarrow\leftarrow\leftarrow\leftarrow$ $\rightarrow\leftarrow\leftarrow\leftarrow$
 $\rightarrow\leftarrow\leftarrow\leftarrow$ $\rightarrow\leftarrow\leftarrow\leftarrow$ $\rightarrow\leftarrow\leftarrow\leftarrow$ $\rightarrow\leftarrow\leftarrow\leftarrow$ $\rightarrow\leftarrow\leftarrow\leftarrow$ $\rightarrow\leftarrow\leftarrow\leftarrow$
 $\rightarrow\leftarrow\leftarrow\leftarrow$ $\rightarrow\leftarrow\leftarrow\leftarrow$ $\rightarrow\leftarrow\leftarrow\leftarrow$ $\rightarrow\leftarrow\leftarrow\leftarrow$ $\rightarrow\leftarrow\leftarrow\leftarrow$ $\rightarrow\leftarrow\leftarrow\leftarrow$
 $\rightarrow\leftarrow\leftarrow\leftarrow$ $\rightarrow\leftarrow\leftarrow\leftarrow$ $\rightarrow\leftarrow\leftarrow\leftarrow$ $\rightarrow\leftarrow\leftarrow\leftarrow$ $\rightarrow\leftarrow\leftarrow\leftarrow$ $\rightarrow\leftarrow\leftarrow\leftarrow$

*Israne, mungat'ku
 alih • kurra;
 Nica, mungat'ku
 alih zu • kurra*

The powers of the letters, however, in TURKISH, vary so greatly from their ordinary values in ASSYRIAN, that no great dependence can be placed on this reading. The first letter, $\rightarrow\leftarrow\leftarrow\leftarrow$, indeed, is probably *men* or *men* rather than *iz* $\rightarrow\leftarrow\leftarrow\leftarrow$, where representing the root $\rightarrow\leftarrow\leftarrow\leftarrow$, "to go," is sounded *en* ($\rightarrow\leftarrow\leftarrow\leftarrow$), perhaps allied to $\rightarrow\leftarrow\leftarrow\leftarrow$, *en*. The power of *lib*, also, for $\rightarrow\leftarrow\leftarrow\leftarrow$, and *kur*, for $\rightarrow\leftarrow\leftarrow\leftarrow$, are doubtful, though sufficiently probable. The root *gat'ku*, for $\rightarrow\leftarrow\leftarrow\leftarrow$, is well known

ASSYRIAN.

$\rightarrow\leftarrow\leftarrow\leftarrow$ $\rightarrow\leftarrow\leftarrow\leftarrow$ $\rightarrow\leftarrow\leftarrow\leftarrow$ $\rightarrow\leftarrow\leftarrow\leftarrow$ $\rightarrow\leftarrow\leftarrow\leftarrow$ $\rightarrow\leftarrow\leftarrow\leftarrow$
 $\rightarrow\leftarrow\leftarrow\leftarrow$ $\rightarrow\leftarrow\leftarrow\leftarrow$ $\rightarrow\leftarrow\leftarrow\leftarrow$ $\rightarrow\leftarrow\leftarrow\leftarrow$ $\rightarrow\leftarrow\leftarrow\leftarrow$ $\rightarrow\leftarrow\leftarrow\leftarrow$
 $\rightarrow\leftarrow\leftarrow\leftarrow$ $\rightarrow\leftarrow\leftarrow\leftarrow$ $\rightarrow\leftarrow\leftarrow\leftarrow$ $\rightarrow\leftarrow\leftarrow\leftarrow$ $\rightarrow\leftarrow\leftarrow\leftarrow$ $\rightarrow\leftarrow\leftarrow\leftarrow$
 $\rightarrow\leftarrow\leftarrow\leftarrow$ $\rightarrow\leftarrow\leftarrow\leftarrow$ $\rightarrow\leftarrow\leftarrow\leftarrow$ $\rightarrow\leftarrow\leftarrow\leftarrow$ $\rightarrow\leftarrow\leftarrow\leftarrow$ $\rightarrow\leftarrow\leftarrow\leftarrow$
 $\rightarrow\leftarrow\leftarrow\leftarrow$ $\rightarrow\leftarrow\leftarrow\leftarrow$ $\rightarrow\leftarrow\leftarrow\leftarrow$ $\rightarrow\leftarrow\leftarrow\leftarrow$ $\rightarrow\leftarrow\leftarrow\leftarrow$ $\rightarrow\leftarrow\leftarrow\leftarrow$

*Tallak, tassad
 Go thou (and) spoil
 Eql nakru,
 the land of the enemy;
 Illik tassad
 (for) he went and spoilt
 Eql ka nakru
 thy land (i.e.) the enemy.*

The first line is a good specimen of variant readings, $\rightarrow\leftarrow\leftarrow\leftarrow$ having the power of *tal*, as well as *pi*, &c., and $\rightarrow\leftarrow\leftarrow\leftarrow$ standing for *lik* and *tas*, as well as *ur*, &c. The root from which our *tassad* and *tasi* is probably $\rightarrow\leftarrow\leftarrow\leftarrow$, in the sense of "taking up," or "hitting" (the produce of)

No. 6.

This tablet is also imperfect. A fracture of the upper corner has destroyed the names of the parties who executed the deed, and has thus very much curtailed our materials for comparison, while the Phœnician writing also, which extends horizontally along three of the side margins of the tablet, is so faint,—having been merely scratched with the nail apparently while the clay was yet soft,—that the forms of many of the letters cannot be traced with any certainty. A small portion of the legend, however, at the commencement is distinctly legible, and this is not without value. The deed relates to the sale of a slave girl, named *Khamburu*, and her mother, whose name is mutilated, for the sum of one mina and eight shekels of silver. The names of the sellers are lost; that of the purchaser is *Lugu* (meaning probably "a doctor," and the same name as that of Luke the Evangelist—Compare לִקְחִי, "learned," and remark that the final guttural of this root always lapses in Assyrian). The Phœnician legend commences with דַּנַּת אַמְתָּא חַבְּשֻׁוּ, *Danat Amtā Khabušū*, "the sale of the female slave *Khabušū*," &c. *Danat* has been already explained. *Amtā* is, of course, the Aramaic form of אִמָּה, of which the Cuneiform correspondent is 𐎶 𐎶𐎵, *Shallat* (?).⁴⁰ The only example that I have met with of the employment of the noun אִמָּה in the inscriptions is in the geographical name of *Amti-khadasti*, for the city of Ammo-chosta, or אִמָּת חַדְּשֵׁת, in reference, no doubt, to the famous Cyprian goddess;⁴¹ but we have there merely the Cuneiform rendering of a Phœnician title. In the reading of *Khabušū* for the Cuneiform *Khamburu*, 𐎶 𐎶𐎵 𐎶𐎶 𐎶𐎶𐎵 𐎶𐎶𐎵, we observe,

⁴⁰ The reading of this word 𐎶 𐎶𐎵, as applied to "a female slave," is very doubtful. It is always used as the feminine to 𐎶𐎵, *ardu*, but I doubt if it ends in *t*, as the suffix attached to it is 𐎶, instead of 𐎶𐎵. The word *Shallat* is used, I believe, both for "plunder" and for "women," and there is some difficulty in distinguishing between the two meanings in some passages, but 𐎶 𐎶𐎵, for "a female slave," is quite a different noun, and is in all probability a Turanian compound.

⁴¹ See Rawlinson's *Ins.*, pl. 48, l. 11. It is impossible to say whether the epithet *khadasat*, which is joined with *amat* in this name 𐎶𐎶 𐎶𐎶𐎵 𐎶𐎶𐎵 𐎶𐎶𐎵, is to be compared with 𐎶𐎶𐎵, "new, young," or 𐎶𐎶𐎵, "holy," or with 𐎶𐎶𐎵, the name originally borne by Queen Esther, and supposed to be the same as 𐎶𐎶𐎵, for "the myrtle;" probably, however, the latter explanation is to be preferred, as the myrtle was especially sacred to the Cyprian Venus.

firstly, the lapse of the nasal before the *b*, which is quite in conformity with the genius of the Phœnician language, and secondly, the substitution of the *Shin*, ש, for the *Samech*, ס, of which we have had a previous example in the reading of חושע for שׁוּשׁוּ = שׁוּשׁוּ אֶשׁ. The derivation is probably from חבש, "to bind," which is حبس in Arabic with the same change of sibilant as in the Assyrian, and the name is therefore peculiarly appropriate to a slave. It is not safe to attempt any further analysis of the Phœnician text. The names represented should be those of the mother of *Khambusi*, and probably of the parties from whom the two women were purchased; but the letters can be only doubtfully traced, and as we have not the Assyrian originals of any of these names in a complete form, the Phœnician readings, even if they were certain, would possess no great interest. Perhaps in the letters . . . שׁוּשׁוּ, near the end of the legend, we may recognise the commencement of the name of the father of one of the sellers, which is represented in Cuneiform by שׁוּשׁוּ אֶשׁ . . . *Khaz* . . . but in no other case can I offer even a conjectural comparison.

No. 7.

The Phœnician legend on this tablet does not appear to be a docket of the contents, but is rather, as I think, the attestation of one of the witnesses to the document. The only difficult character in the whole legend is the first letter; but I can hardly doubt from other examples that it is intended for a *Shin*, ש, though the form is not usual on these tablets. I read the entire inscription as simply שׁוּשׁוּ עבד־נְבוֹ, "the attestation of Abed Nebo," and propose the following explanation:—שׁוּשׁוּ is everywhere used in these Phœnician endorsements before the attesting signatures (compare No. 15, where there are two similar examples, and also the Phœnician dockets given by Grotefend, in the "Zeitschrift für die Kunde des Morgenlandes," vol. ii. p. 177; and by Gesenius, *Mon. Phœn.* vol. ii. tab. 32, pl. lxxvii. b.); and is thus certainly a substitute for the character שׁ on the Assyrian tablets; but the etymology is not equally clear. *Shakhat* would seem to be a feminine noun like *danat* and *biyat*, and I am thus tempted to compare the Arabic حَقِيقَة, "truth," notwithstanding that the initial letter of that word, which is equal to the Hebrew ש, very rarely answers to the Phœnician *Shin*. In support of this explanation, I further observe that in Syriac, derivatives from this root,

شهادة, have a special reference to the signing of a name, and I also recall the fact that in the East at the present day every Mohammedan who attests a document places before his autograph the word صحيح "It is true," a custom which has led to the Anglo-Indian vulgarism of *Shy* as equivalent to a signature. On the other hand, there are some grounds for preferring the alternative derivation of *Shakhat*, from שחט, or شهد, "to witness." The meaning of a "witness," in the first place, is more appropriate, as it would seem, than "truth;" again, in the famous copper *Sassanum* from Malabar, the names of all the Mohammedan witnesses are actually preceded by this word شهد, and thirdly, the orthography is more in harmony, as the initial sibilants are of the same class, and the hard and soft aspirates, which constitute the only difference, are frequently confounded. The termination, however, offers, as I think, an insurmountable obstacle to this explanation, for the Phœnician terminal 𐤍 cannot under any circumstances represent a radical 𐤍, nor is it allowable to regard שחט as a contraction of the true Aramaic term שחטות, which occurs in Gen. xxxi. 47.

The word which follows שחט may be certainly read as עבד-נבו. *Abed-Nebo*, "the slave of Nebo," a name which would be represented in Cuneiform by 𐎶 𐎠 𐎶 𐎠, and which is actually borne by one of the witnesses to this particular document, though it may fairly be doubted if the two names, written in Assyrian and Phœnician characters, refer to the same individual.

The deed itself relates to the sale of a slave girl named *Guladallat*, by her joint owners, to the same *Zikkullanu* whose dealings have before come under our notice. The price was two-thirds of a mina of silver, and the sale is registered with the usual formalities.

The tablet is dated from *Nabu-shar-usur*, who was Eponyme during the last year of the reign of Sennacherib, answering to B.C. 683.⁴⁴

⁴⁴ See *Journal of Royal Asiatic Soc.*, vol. vii. p. 344, pl. 6. Mr. Shakespeare furnished a reading of the Arabic signatures to this document, but no one has, I believe, attempted to decipher the Pehlevi and Hebrew names, which are nevertheless exceedingly curious. The Parsee witnesses must have been the near, if not the immediate, descendants of the first exiles from Persia, as the Pehlevi character which they employ is nearly that of the early Mohammedan coins. The names are preceded by two words, which seem to be

Mashra li, "sealed by," or "the seal of." (Compare Pers. مهر, *mahr*.) The corresponding expression before the Hebrew names is doubtfully read as
המכר מן

No. 8.

The Phœnician name, clearly incised on this tablet, is to be read with tolerable certainty as דַּיְנִי קֻרְבָּן , *Dainu kurban*, the last letter, which is alone defective, being restored from the Cuneiform original. This original is written 𐎠 𐎠𐎵 𐎠𐎫 𐎠𐎥 𐎠𐎵 , and applies to a certain householder who sells three tenements in Nineveh for the sum of thirty shekels of silver. The meaning of the name is probably "he who adjudges the offerings" *dainu* being a participle from the root דָּן , "to judge," and *kurban* being identical with the Hebrew קֻרְבָּן , Arab. قربان , and Greek $\kappa\omicron\rho\beta\acute{\alpha}\nu$ (Mark vii. 11). That the group forming the first element of this name had the phonetic value of *dainu* had long ago been surmised, from the orthography of 𐎠𐎵 𐎠𐎫 𐎠𐎥 , employed in the East India House Inscription of Nebuchadnezzar, col. iv. line 29, as an epithet of "the Sun," and in place of the ordinary reading of 𐎠𐎵 𐎠𐎫 ; and the Phœnician transcript of the term is, therefore, nothing more than a verification; but I do not even yet clearly understand the reason of this mode of writing. The letter 𐎠𐎵 alone represents the root דָּן , "to judge," being explained in the bilingual syllabary by 𐎠𐎵 𐎠𐎫 𐎠𐎥 (No. 184), and is thus independent of any adjunct. Should such an adjunct be employed, however, it ought to represent, according to ordinary usage, the phonetic complement of the verbal form to which it is attached, and this can hardly be the function performed by 𐎠𐎫 , which, amongst its various powers (*sil, tar, kut, khas, &c.*), has no nasal value whatever. I suspect, therefore, that the sign 𐎠𐎫 , which, as a root, and especially in the epithets of the gods, is very extensively employed, and in many different senses, is here joined to 𐎠𐎵 merely to qualify, or perhaps intensify, the power of that verb, and without any influence on the pronunciation.^a

The sign 𐎠 , which precedes the names of the witnesses on the Assyrian tablets, seems to be simply the preposition *pan*, "from," or "of." On the Babylonian tablets the list of witnesses is usually headed by the expression 𐎠𐎵 𐎠𐎫 𐎠𐎥 , which probably means, "the persons putting their hands."

^a The most ordinary use of 𐎠𐎫 is to represent the root *akka*, "to cut off," but it also answers to *shumu, shigu*, and half-a-dozen other roots,

We further see from the example of this legend that when the docket represents a mere name, without any descriptive expression, that name belongs to the owner of the property which is sold, and not to the buyer.

No. 9.

The inscription on this tablet refers to the disposal of a considerable property, consisting of lands, houses, gardens, orchards, &c., &c., on a six years' lease, and at a rent of one mina of silver per annum, the lessee being the same *Zikkullanu* whose name occurs on tablet No. 4.

The Phœnician docket is mutilated, the commencement of the legend, which reads דנת חקלא *danat khaqla*, "the sale of land," being alone legible. חקלא here answers to the Cuneiform 𐎶 𐎶𐎶𐎶 , the Turanian term for 𐎶𐎶 𐎶𐎶𐎶 𐎶𐎶𐎶 , *eqil*,^a as in No. 5, and the only uncertainty is whether the *N*, which is the last letter visible on the broken tablet, may belong to the preceding word (as in the Aramaic form of נחל for נחל), or whether it may be the initial letter of another word. As the Cuneiform 𐎶𐎶𐎶𐎶 , *bit*, "a house," however, immediately follows 𐎶 𐎶𐎶𐎶 , in the list of properties on the tablet, for which it would be difficult to find a correspondent beginning with *N*, I propose to compare the Phœnician word directly with its Chaldean correspondent נחל, regarding the orthography as more correct than the imperfect reading of חקלא, in No. 5. The Hebrew grammarians Gesenius, Schindler, &c., are all agreed that the word נחל, signifying "a field" in Chaldean, Syriac, Æthiopic, and Arabic, is formed by

besides being immediately cognate with נחל; in so much so, that in one list 𐎶𐎶 and 𐎶𐎶 are bracketed together, the former being explained by 𐎶𐎶 𐎶𐎶 𐎶𐎶 , *dānu*, and the latter by 𐎶𐎶 𐎶𐎶 𐎶𐎶 , *dānu*; and in the epithets of the gods, the two signs seem to be used indifferently.

^a In continuation of note 41, on the reading and signification of 𐎶 𐎶𐎶𐎶 , I may also draw attention to the errors which Mons. Oppert and Mr. Fox Talbot have committed in their translation of the inscription on Michaux's stone, owing to their ignorance of this term. Mons. Oppert translates the word uniformly by "table," and supposes it to refer to the engraved stone which he is discussing. Mr. Talbot writes *hatszib* and *atsib*, and compares the roots 𐎶𐎶 and 𐎶𐎶 , translating sometimes by "figure" and sometimes by "sculpture." (In the Sargon Inscription he read *asib* "inhabiting.") The word 𐎶 𐎶𐎶𐎶 , however, throughout the inscription in question refers to the "land" settled upon the deviser's daughter, according to the terms of the deed; and it must be read *eqil* (for 𐎶𐎶𐎶), as already explained.

metathesis from the root חלק, "to divide," or "portion out," but the Assyrian *eqil* or *ekil* seems rather to suggest a connection with אכל, "food or grain," from אכל, "to eat," given in Cuneiform as 𐎶𐎵 𐎶𐎵𐎶, and it is doubtful, moreover, if חלק, in the sense of "portioning out land," was known to the Assyrian.

No. 10.

I include this legend, which has been often published and commented on, because it occurs on a clay tablet, evidently of the same class as those from which I have copied the other bilingual readings. The original tablet was brought to Europe, as it would seem, by Ker Porter, and, according to Gesenius, should be now in the Paris Museum (See Ges. Mon. Phœn vol. i. p. 462), though, if it be there, it is strange that the bilingual reading it exhibits should not have been already turned to account by the Assyrian scholars of that city.

The legend may be read with certainty as בית אִדְלָנִי, *Beiat El-idil-ani*, and I should expect to find in the corresponding Cuneiform text the registry of a debt due by a man named 𐎶 𐎶𐎵 𐎶𐎵𐎶 𐎶𐎵 𐎶𐎵𐎶, which is a common Assyrian name, in the same way as in No. 12, which will be presently examined, we have an allusion to the *beiat* or debt of *Manuki Arba-il*. At any rate, whatever may be the meaning of בית, it is pretty certain that the next word is a *bond fide* Assyrian name, formed according to the usual construction, and probably signifying "God is just to him." It would be very interesting to examine the Cuneiform text, both in order to verify the application of the word *beiat*, and which is more important, to ascertain if the Phœnician אל, at the commencement of the name, answers to the Cuneiform 𐎶𐎵, which is "a God," in general, or whether, as I think more probable, it does not rather indicate some particular divinity, the Ηλ or Ἠλς, of the Greeks, and the 𐎶𐎵 𐎶𐎵𐎶 𐎶𐎵𐎶, or 𐎶𐎵 𐎶𐎵, of the inscriptions.* The

* The root אכל, however, is represented by an independent Accadian sign, 𐎶𐎵𐎶, and the connexion of this term with 𐎶𐎵 𐎶𐎵𐎶, in the conditions of lease, on the clay tablets, seems to be merely accidental, alluding to the enjoyment or possession of the land for a term of years.

** Cuneiform scholars have been usually content to name this god *Bel*, or *Beus*, not only because the sign 𐎶𐎵 has that phonetic power, but from his position as "the father of the gods," at the head of the Pantheon; but I








second element of the Phœnician name almost certainly represents the Cuneiform 𐎶𐎵𐎶 , which, as a verbal noun, is often rendered

have myself always expressed doubt on the subject, and indeed, in my original Mythological Essay (Rawlinson's Herodotus, vol. i. p. 594) I adduced strong arguments to show that the god in question could not, at any rate, represent the Belus of later Babylonian history, as that deity was proved to correspond with the Merodach of the inscriptions. I had not, however, at that time, access to the evidence which now inclines me to identify 𐎶𐎵𐎶 with Saturn, and to read his name as *Il* or *Ilin*. This evidence is briefly as follows, 1stly, the sign 𐎶 simply means "old," being explained in the vocabularies by 𐎶𐎵𐎶 , 𐎶𐎵𐎶𐎵𐎶 , *labir*, and 𐎶𐎵𐎶 is therefore "the old god."

Now, "the old god" is exactly the *بيل شيخ الوقار* of the Sabæans of Harran, as individualized by the famous *En-Nedîm*, in the Fihrist (see Chwolsohn's *Ssabier und der Ssabismus*, vol. ii. p. 39); and this deity is directly identified with *زحل*, or "Saturn," in *Abu Rihan's* chapter on the Sabæans—a document, by-the-by, of great value, and which ought certainly to have been incorporated in Chwolsohn's exhaustive work. 2ndly. The name which Damascius (see Cory's Fragments, p. 318) gives to the second member of the Babylonian triad, is *Ἰλλίνοϛ*; and as his other names, *Ἄνοϛ* and *Ἄοϛ*, exactly answer to 𐎶𐎵𐎶 and 𐎶𐎵𐎶𐎵𐎶 , so this title of *Ilin* should represent the god 𐎶𐎵𐎶 or 𐎶𐎵𐎶𐎵𐎶 . 3rdly. In a trilingual list of mythological synonyms, the phonetic reading of 𐎶𐎵𐎶 , *Elim*, is actually given for 𐎶𐎵𐎶 , so that it seems highly probable the vernacular name of the god was *El* or *Il*, with an optional plural termination in *im* or *in*, "honoris causâ," as in *Elohim*.











However, it is also possible that *Bel* may have been used equally with *Il*, as the name of the god. It is certain, at any rate, that the group 𐎶𐎵𐎶𐎵𐎶 , which simply means "the lord," as 𐎶𐎵𐎶𐎵𐎶 means "the lady," stands constantly for the generic noun *Bilu*, "a lord," in the great inscription of Nebuchadnezzar; and we further see that *Bil*, not *Il*, is the name in the Fihrist, to which the epithet "the grave old man," *شيخ الوقار*, applies. Indeed, we have the authority of Damascius for using the two names indifferently—(ὅτι Φοίνικες καὶ Σύροι τὸν Κρόνον Ἡλ καὶ Βῆλ καὶ Βολάθην ἐπονομάζουσιν, Phot. Bib. Edit. Hæschel. col. 1050, where Βολάθην is perhaps *בעל יתן* for *ישן*, with the usual change of the Hebrew *Shin* to the Aramaic *Tau*); and if the generality of authors identify Belus and Saturn (see Selden de Diis Syris., p. 155), Sanchoniathon, on the other hand, says distinctly ὁ Ἰλος τοῦτ' ἐστὶν ὁ Κρόνος (Cory's Fragments, p. 13).








The identification which I formerly proposed of *Il* and *Ra* originated in a mistake. It is true that the Proto-Chaldean (or Accadian) 𐎶𐎵𐎶𐎵𐎶 is constantly replaced in the vocabularies and bilingual exercises by *Il* or *Ilu* (written either simply as 𐎶𐎵𐎶 , or phonetically as 𐎶𐎵𐎶𐎵𐎶 ; amongst other examples compare the different orthographies of the name of Babylon);













phonetically by   , *idlu*, and probably, therefore, answers to a root corresponding with the Arabic عدل, while the termination *ani* can hardly be other than the Cuneiform  , or  , which is, I believe, a pronominal suffix ⁴⁹

No. 12.

The tablet to which this legend belongs is of the class which I have called double; that is, it is formed of two distinct tablets, very indifferently baked, and inclosed one within the other, the Cuneiform writing, with some very slight variations, being the same on both, and the Phœnician docket being on the outer casing only. The double tablets seem to relate uniformly to loans, instead of sales. In the present instance the Cuneiform writing, as far as

but in that case    is to be sounded *T'hingira* or *T'himira*, the sign  being the mere phonetic complement; and it represents not any particular deity, but the generic Turanian name for "god," connected on the one side with the Turkish *Tengri*, and on the other, perhaps, with the *Δημιουργός* of Sanchoniathon, and the *تمورا* of Mesopotamian tradition (see Chwolson's *Sabier*, vol. ii. p. 291). The title of lord— in Assyrian, i. e., *belu*—was represented in some of the Proto-Chaldean dialects by *Mul* ( ), and in this form we see the origin of the *Moloch* of Nicolaus (see Müller's *Fragments*, Hist. Græc., vol. iii. p. 361). Another name for Saturn, in what I suspect to have been a Scytho-Arian dialect of Chaldeæ, was   , *Habashaga* but I do not recognize the etymology. For numerous examples of the application to Saturn of the epithet "old," see Chwolson's *Sabier*, vol. ii. p. 276.

⁴⁹ It is impossible to say whether the termination in *ani*, which is so very common in Assyrian names, be the Turanian suffix of the 3rd person singular, or the Semitic suffix of the 1st person. Either explanation is sufficiently applicable, though perhaps the evidence is rather in favour of the latter, for whilst I have ~~observed~~ one single instance of *ani* to interchange with *su*, I have, on the other hand, observed substitutions of the suffix which seem to point to the first person, as, for instance, in the common name of Nebo, which, as is well known, is usually written       .

but for which I have also met with the reading of    , as if the signification were "my prophet" or "instructor," the termination in  being the Turanian suffix of the 1st person (cognate with  and , as in    and  , for "with, us" and "with me.") Observe, also, with regard to *idlu*, that the meaning seems to be "great" rather than "just," and that we may suppose, therefore, the A-cuneiform root *adul* to have corresponded with 𐤁𐤋 rather than 𐤁𐤋.


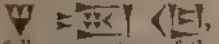


I understand it, states that "*Mannukî-Arba-il* had borrowed ten "silver shekels of the holy standard from *Billu-balat* (for a year), "on condition that the sum increased double (that is, at cent. per "cent.);" and the corresponding Phœnician docket seems to be כַּא (..) בֵּית קַדְס (שֶׁקֶל XX) לְמַנְגִּי-אַרְבֵּל, "From Manugi-Arbil 20 holy shekels, a debt to be recovered" (?) In this rendering, however, there are many questionable points, both of orthography and grammar. It is quite certain that the Phœnician name at the commencement answers to the Cuneiform 𐤎 𐤌 𐤍 𐤏 𐤓, and the use of *Gimel* 𐤂 for the Cuneiform 𐤏 𐤓 would seem to show that *Mannukî* must be a derivative from 𐤍 𐤏 or 𐤍 𐤏, instead of signifying "Who is like?" as Mr. Oppert has conjectured, comparing it with the Hebrew names Michael, Micah, Micaiah, &c.⁵⁰

The two doubtful letters which commence the second line are, I suspect, numerals. They are something like the Palmyrene sign for 10, which is supposed to be a degraded form of *Yod*, the 10th letter of the alphabet; and may thus possibly represent 20, though in Palmyrene and in Numismatic Phœnician there was a special character for that number.⁵¹ If this be so I would, then, suggest that the character which follows, and of which the top only can be traced, may be an arbitrary sign for a shekel of silver. At any rate, the second line of this legend ought, it would seem, to define the amount of *Mannukî-Arbil's* debt, subject, however, to the doubt as to whether the original loan of ten shekels might be noted, or whether the figures might refer to the sum, doubled in amount, that was to be recovered. After the number of shekels we have


⁵⁰ Les Inscriptions des Sargonides, p. 20. It is possible, however, that the use of the Phœnician 𐤂 may be a mere vulgarism, owing to the double power of the Cuneiform 𐤏, which was *qi* as well as *ki*, and that the etymology of *mannukî*, or *mannugi*, may be thus, after all, what Mons. Oppert has suggested. At any rate, neither the sense of "illuminating," from 𐤍 𐤏, nor of "sacrificing," from 𐤍 𐤏, will at all suit the many compound names of which the first element is 𐤎 𐤌 𐤍. This term is prefixed, 1stly, to the names of the gods; 2ndly, to the names of cities; and 3rdly, to the names of relatives, and perhaps classes of men. There are, indeed, some twenty Assyrian names thus formed, and I can find no meaning more generally applicable than "who as?" or "what as?" (in the sense of "who, or what, is equal to?"), though such an explanation is not altogether satisfactory.

⁵¹ See Gesenius Mon. Phœn., vol. i. p. 88. A further argument against reading these two letters as XX, is, that we see on the Lion Weights in the British Museum (No. 1) the ordinary horizontal line — employed for the numeral 10. Altogether it must be admitted that my proposed reading of this Phœnician line is most questionable.

clearly the word קדס, which may very well be the Assyrian form of קדש, adopted by the Phœnician scribe, with the same confusion of sibilants that we have before observed in many instances. The sacred standard, or "standard of the sanctuary," as we usually call it in referring to the Jewish weights, is indicated on these tablets by the name of the great goddess of Nineveh or Arbela; and it is that designation which here answers in the Cuneiform text to the *Kadas* of the Phœnician legend.⁶² In continuation, we have a word בִּית, which is very difficult of explanation. Where the same word occurs on an Assyrian tablet, now in the Paris museum, Gesenius takes it for the ordinary Hebrew noun signifying "a house" (see Ges. Mon. Phœn. vol. i. p. 462), and the same explanation might possibly suit the present passage, the allusion being to the temple of the goddess in which the holy standard was used;⁶³ but I do not myself think that this is the true explanation of the term. I rather suspect that בִּית, *Bryat*, is a corrupted form of the Arabic بَيْع, the root ببيع, which originally applied, perhaps, to any "bargain," or "money dealing," having its exact equivalent in the Assyrian *Bukh*, which in this, and similar passages, appears in the phrase *ina bukki itisi*, "he borrowed on contract," or "on a bargain."⁶⁴ The last word of the Phœnician legend, of which the

⁶² The phrase on this tablet relating to the standard is .  =  , "of the goddess XV of Nineveh." I shall reserve a full examination of the different standards of weight which were current in Assyria for the continuation of this paper on the legal tablets; but I may here note that there seem to have been three distinct *manas* in common use—the *manah* of the king, or "royal manah," the *manah* of the great goddess of Nineveh and Arbela, or "the manah of the sanctuary," both of these being native Assyrian weights, and the *manah* of Carthagenish, which is the most constantly quoted of all. I believe that each of these manahs contained sixty shekels, but that there was a slight difference in their relation to each other. As for 'the country manah' which has been assumed from the Phœnician legends on the Museum weights, I cannot think myself that there is any foundation for such a distinction. The expression בִּי אֶרְקָא, which is added to the declaration of the number of manahs, does not refer as I believe, to a standard at all (in fact the phrase is found in Nos 2, 3 and 4 in addition to the definition of the royal standard), but is merely a geographical indication, intended to distinguish the weights of Syria and of Assyria. See further, under Note 63.

⁶³ I have sometimes thought that the whole legend might be read לִי מַנְּגִי אֶרְבֵּל זִי קַדְס בֵּית - - כָּא, *Li-Manugi Arbel zi kadas bit. ka*, "of Manugi-Arbel, priest of the temple of . . . ka," but there is nothing in the Cuneiform text to indicate that the borrower of the ten shekels, *Mannuki-Arbel*, had any connexion either with the great goddess or her temple.

⁶⁴ *Bukha* () may very well stand for ببيع, the change of vowels being perfectly regular, and the guttural, *kh*, being a common substitute for the *sin*, *y*; but I am not so sure that it is allowable to suppose the

final **𐤊** is alone legible, may then, perhaps, be some verbal form (either from **𐤍𐤕**, or some kindred root). and the entire docket may be translated, as I have already suggested, "from *Manugi-Arbil* 20 holy shekels his debt (or contract) to be taken."

No. 13.

This legend is a mere fragment, giving the name, probably, of the party executing the deed. The Cuneiform original of the name, however, is not preserved, nor, indeed, is the tablet sufficiently perfect to enable us to ascertain the purport of the inscription. We can only infer, from the shape of the broken tablet and the few lines of writing which remain, that the document does not belong to the ordinary class of legal transfers of property; it is rather, as I think, of a sacred character.

The Phœnician name may be read with tolerable certainty as **נבשלים**, which exactly answers to the Cuneiform **𐎶 𐎶𐎵 𐎶𐎵 𐎶𐎵** **𐎶𐎵** **𐎶𐎵**, *Nabu-shallim*, signifying "Nebo (is my) preserver;" and an imperfect word follows which commences with **𐎶**.⁵⁵

No. 14.

This is an important legend, as the Phœnician writing is very clearly marked on the tablet, and the Cuneiform names, both of the sellers and buyer of the property, are given with perfect distinctness. The Cuneiform writing recites the particulars of the purchase of a house in Nineveh for half a mina of silver, by *Kukullai*, from its owners, **𐎶 𐎶𐎵 𐎶𐎵 𐎶𐎵 𐎶𐎵 𐎶𐎵 𐎶𐎵 𐎶𐎵**, *Paqa-ana-Arba-il*, and **𐎶𐎵 𐎶𐎵** **𐎶𐎵**; and as the Phœnician legend is without any prefix, it must be held (as in No. 8) to represent the names of these sellers. The first Phœnician name, also, **פקארביל**, *Paqa-Arba-il*, does thus represent, as nearly as possible, the first Cuneiform name, the only variety being that the particle *ana* is left out, and that by the introduction of a penultimate *yod*, the full orthography is perhaps given of *Arba-i'*,⁵⁶ for the town of Arbela, instead of the contracted

lapse of this radical letter in order to obtain the Phœnician form of **בית**. In favour of the assimilation I can only refer to No. 10, and point out that in that legend, at any rate, the word *beiat*, preceding a proper name, is apparently of the same class as *danat* and *shakhat*; and that *Beth* or *Beit*, "a house," offers, therefore, a very insufficient explanation.

⁵⁵ Dr. Levy, I find, has already recognized this reading in his *Phönizische Studien*, part ii. p. 24.

⁵⁶ The penultimate letter in this name would seem, however, to be a *Vau*, **ו**.


form of *Arbil*, as in Nos. 1 and 12. The only real difficulty in this bilingual legend relates to the second word, which is given in Phœnician as 𐤀𐤍𐤁𐤋 , and if it be a proper name, must answer to the Cuneiform 𐎶 𐎶𐎵𐎶𐎵 𐎶𐎶𐎶 . Now, the first question to be asked is do these two forms really correspond? and to this I am unable to give a positive answer. On the one hand, it may seem strange that the junior partner in a property should be named in the docket, since, although entered as a matter of form in the actual conveyance at the head of the deed, he is passed over in the subsequent penalty clause as unimportant; but, on the other hand, there is no possible explanation that I can suggest for 𐤀𐤍𐤁𐤋 , placed as it is on the margin of the tablet, immediately under the name of the principal owner except that it represents the name of the second or joint owner. If this assimilation, then, be admitted, the sign 𐎶𐎵 must have, amongst its many values, the power of 𐤁𐤍 , *sir*, and the vernacular name of the "great goddess," represented by the sign XV, must be positively 𐤀𐤍 , *Asha*. There is no other evidence, that I am aware of, connecting 𐎶𐎵 with the sound of *sir* or *sur*, nor am I at all sure what may be the meaning of such a word prefixed to the name of a god. That the sign 𐎶𐎶𐎶 , however, equivalent in numbers to 15, does here represent the name of the great goddess, is rendered certain by the orthography employed on other tablets, where the same name is written with the determinative of a god, 𐎶𐎶𐎶𐎶 , between 𐎶𐎵 and 𐎶𐎶𐎶 .













































































































With regard to the etymology of these names, I can only suggest for *Papa ana Arba il* the meaning of "go forth to Arbil" or perhaps "proclaim to Arbil" (*Papa* being imperative of 𐤏𐤏𐤏 ; compare 𐤏𐤏𐤏 , Dan. iii. 26); and for *Sir-Asha*, the possible meaning of "Slave of Asha," *Sir* being a contraction for 𐤀𐤍𐤁𐤋 , from 𐤀𐤍𐤁𐤋 , "to bind," but I admit that I have no other authority for the

rather than a *god*, according to the Samaritan Hebrew tablet given by Gesenius (Mon. Phœn. vol. ii. pl. 3), and in that case we must suppose the name to have been pronounced *Arba il*, the same change of vowels taking place as in *Ursalman* for Jerusalem, and *Shearun* for Samaria (Samarra). Another instance of the substitution of the 𐎶 for the 𐎶 may be observed in the orthography of the Phœnician dual form 𐎶𐎶𐎶 for 𐎶𐎶𐎶 ("two thousands"), in the legend on the Lion Weight, No. 4, where, moreover, in the reading on the base, the exact form is used for the *fax*, which we have in this transcript of the name of *Arba il*.

employment of  as a Turanian root, either with this sense or sound.⁶⁷

No. 15.

The tablet from which these names are copied is a mere fragment, of Babylonian origin, and probably dating from the time of Nebuchadnezzar. It seems to record a money contract very much in the same terms as were current in Assyria, but it furnishes no means of bilingual comparison. The names, indeed, preceded by the word , as in No. 7, are those of independent witnesses, who were probably of Phœnician origin, and who thus preferred to

⁶⁷ Since writing this, I have lighted on a fragment of vocabulary amid the debris in the British Museum, which has suggested an explanation for the employment of  as equivalent to . The Turanian root  seems to have signified originally "to swell," and to have been thus equivalent to the Semitic roots  (Cun.      ) and  (Cun.      ). I have long been aware of the employment of the root in the first named capacity, in representing the name of               , which I always maintained to be identical with *Nabu-nahid*, or *Nabonidus*, in opposition to Dr Hincks and Mons. Oppert (see my paper on the Orthography of some of the later Royal Names of Assyrian and Babylonian History, in the Royal Asiatic Society's Journal for 1855); but this reading of     for   is the first example that I have observed of the use of  in a proper name for the alternative root . The Hebrew , it must be remembered, is cognate both with  and , so that the employment of the Phœnician  need not surprise us. With regard to the pronunciation of the Accadian root , it would seem to have its normal power of *im* in the name        , which is given by Abydenus as *Nabonindoxos*, for *Nabu-induk*; but in the vocabulary, where it is explained by          , the Accadian column seems to have the reading of           , *Mir* (and so the God of the air,         , i. e., "the glorious god," is named in Accadian           , *Mir-mir*). I should propose now to read the name of            as *Saru-Asha*, and to translate it "glory of *Asha*," as *Nabu-nahid*, or *Nabu-induk*, is "Nebo the glorious." Cuneiform scholars are familiar with this employment of one Accadian sign to represent two or more Semitic roots, corresponding in sense, but entirely different in sound, as, for instance,  for *ebas* and *bani*, "to do or make;"  for *elad* and *bani*, "to beget;"  for *sakan* and *sarak*, &c., &c.









be recorded in their vernacular characters. They occur at the end of the list of Babylonian witnesses, and being merely scratched on the hard clay are altogether of too uncertain a character to be worth the trouble of analysis. After each of the names is the word 𐤀, which I suppose to be the feminine demonstrative pronoun answering to the Hebrew 𐤀, so that each line reads, "this is the attestation of"

Nos. 11 and 16.


It will be convenient to examine these two legends together, as the tablets to which they belong are of the same class, and the inscriptions help to explain and illustrate each other. It would seem that grain assignments⁸⁸ were issued in Assyria on a particular shield-shaped piece of baked clay, quite different from the ordinary flat or bulging tablet, on which were registered deeds of sale, loans, and contracts. At any rate, most of the documents of this class that I have found are recorded upon such triangular bits of clay, which were, moreover, evidently intended to be suspended, as a hole is passed through them at the upper corners, for the insertion of a string. There are only two of these triangular tablets in the Museum which bear Phœnician characters, and of these, the one that is perfect has no corresponding Cuneiform, while of the second, which had a Phœnician text on one side, and a Cuneiform text on the other, but one small corner remains. The longer inscription, No. 16, is divided into two portions; the first portion, consisting of two lines, is, as I think, a simple date, recorded in the usual Assyrian fashion, "The 5th of Khaziran, in the Eponymy of *Saru Nerig*;" but this rendering is not, it must be owned, perfectly clear. In the first place, the number 5 would seem to be given twice over; that is, before the name of the month, under the technical form of the letter 𐤅, as in No. 2; and after the name of the month, under the ruder figure of five separate strokes; and again, the name of Khaziran is spelt with a *Tsadi*, 𐤕, instead of the *Zain*, 𐤆, which is now used both in Syriac and Arabic⁸⁹. The










⁸⁸ It is perfectly in accordance with Eastern usage to issue assignments of grain, in lieu of assessment upon the farmers and landed proprietors, these assignments being made payable to princes of the house, or officers of the court, or other claimants on the government. The tablets 11 and 16 are probably assignments of this nature, though it is possible they may be mere acknowledgments of a private liability.

⁸⁹ The derivation of *Khaziran* has never been at all satisfactorily explained; but the Phœnician orthography which is here employed suggests at once a

identification, however, of this name, חצרן, with the ninth month of the present Syrian calendar, is not, I think, to be questioned, and it is, thus, a source of great disappointment that we have not the Cuneiform correspondent; since we could with that aid decide positively whether the Assyrian year commenced at the vernal or autumnal equinox, and we should be thus able to attach a name to each of the twelve signs which represent the Assyrian months. I believe, myself, that *Khasiran*, which answers to *Sivan* in the Jewish calendar, was the third month of the Assyrian year, and was thus represented by the sign , because, firstly, I find that the assignments and sales of grain recorded on the tablets, are usually dated from the first three months of the calendar, namely, , , and , that is, during April, May, and June, which constitute the harvest season in Mesopotamia; and secondly, because the sign of the second month, , is also the sign for a Bull, answering to the Taurus of the zodiac, and the *Thuravahir* of the Persian calendar (where *Thura*⁶⁰ is probably the same word as *Taur* and תור); but there is, on the other hand—that is, in favour of the year commencing with the autumnal equinox—the argument that *Tishrin*, which is the first month of the present Syrian calendar, is apparently derived from the verb שרא, “to begin;” while the sign , which represents the first Assyrian month, is used, perhaps, as a monogram for this same root, the equivalents of  and  being given in the Bilingual Syllabary, No. 256.⁶¹ In continuation, it is of much interest to

connexion with the root חצר or خضر, “to be green,” precisely as the preceding month was named *Zib* and *Ayar*, from the “brightness” and “beauty” of the spring flowers. See Gesenius, in voce, ח.

⁶⁰ Compare line 56 of the Babylonian text of the Behistun Ins. with col. 2, ls. 61 and 62, of the Persian text. Mons. Oppert, however, translates *Thuravahir* simply “le printemps” (*Exped. en Mésopot.* p. 225), and takes no notice of its connexion with the Assyrian .

⁶¹ It is quite possible, however, that   , given as an equivalent of , may not answer to שרא, “to begin,” but may rather correspond with שחר, “to swell or exult,” which I have elsewhere shown to be also represented by ; for the general use of  is as a title of honour (“the noble,” or “the glorious”), and it is thus equally applicable to a “noble” building or “tower,” as in the name of Borsippa (“the tower of the ruler”), or to a “noble” king (*Parakku*, the Semitic equivalent of  being synonymous with  , *sarru*), or to a class of,

find the Phœnician word **למ**, answering to the Cuneiform **𐎠-𐎶**, or **𐎠-𐎶** **𐎶**, and applied to the office of naming the year, or, as it is now generally called by Assyrian scholars, "the office of Eponym." With regard to the meaning of the word, I adhere to my proposed derivation from **למ**, "to be near," considering the title to be equivalent to the modern term **مقرّب**, *Mukarrib*, in preference to Dr Hincks's explanation of "seer," which he conjectures to have been given from the officer in question being required to see the new moon, and thus regulate the calendar.

With regard to the name of the Eponym, I confess to some uncertainty. *Saru Nerg* would be a perfectly legitimate compound, formed like *Saru-Ashu* (No. 14), and signifying "the glory of Nergul;" but no such title as **𐎠 𐎶 𐎶 𐎶 𐎶 𐎶** is found in the Canon, or in the supplementary list of Eponyms that I have collected from the dated tablets; nor am I at all sure as to the correct reading of the first element of the name, the initial letter, which I have given as **𐎶**, being scarcely legible, and the second letter being perhaps a **𐎶**, instead of a **𐎶**, for the two characters are hardly distinguishable in the ancient Phœnician. That *Nerg*, however, is the second element, I think almost certain, and I am thus led to suppose the corruption of the genuine form *Nergal*, which we perceive in the *Ἀβερρήργιος* of Josephus, and in the *Nerg* of the Mandaean books, to be of very ancient date.*

We now come to the essential part of the inscription, where we are much assisted by the bilingual fragment No. 11. I read **𐎶 𐎶 𐎶 𐎶 𐎶 𐎶**, *Seorum si bar Malka*, "the barley of the son of the king," and I compare No. 11, where the Phœnician text seems to have been identical, and where the Cuneiform has **𐎶 - - - -**

𐎶 𐎶 𐎶 𐎶 𐎶 𐎶. The sign **𐎶** can be shown, from a multitude of examples, to be a determinative of cereals, but I have never found any direct proof as to the distinction of the different sorts of grain, nor, indeed, am I able to give with any certainty the phonetic reading of **𐎶 𐎶 𐎶**, **𐎶 𐎶 𐎶 𐎶 𐎶 𐎶**, and **𐎶 𐎶 𐎶**, though I believe the two first groups to be equivalent to the Hebrew words **חטים** and **שערים**, signifying "wheat" and "barley,"

divine beings (**𐎶 𐎶** being also a special name for the "spirits" of the earth).

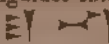







* For a full discussion of the name and character of the Assyrian god, *Nergal*, or *Mara*, see Mr Ewing on the Babylonian Mythology, Sect. 21 (Rawlinson's Herodotus vol. 3 p. 611).

and the third group, which occurs very frequently on the tablets, I suspect to represent "rice."



In fragment No. 11, the prince's barley is to be furnished by two people—three *homers* by one, and two *homers* and a fraction by another; in all, five *homers* and a fraction. In No. 15 the levy is on a single person, *Nabu-irib-ani*, as I am inclined to read his name, and the amount to be furnished is stated at five City *Mans* and seven *Ephahs* (1). The Phœnician letters על נבירבן, indeed, are perfectly clear, and would seem to represent the Assyrian name 𐎶 𐎠𐎵 𐎶 𐎠𐎵 𐎶 𐎠𐎵 𐎶 𐎠𐎵, which signifies "Nebo magnifies me," though the omission of the final *Yod* is hardly regular; at any rate, whatever the exact Cuneiform orthography may be, the name is certainly that of the person upon whom the prince's barley is levied, and the amount to be delivered is given in the two last lines of the legend. These lines seem to me to read (VII) בן עירן (V), which I suppose to be "five *Mans* of the cities and seven *Ephahs*;" the City *Man* (or *mana iran*) being perhaps the same as the Carchemish *Maund*, so often quoted on the Museum tablets.⁶⁰














⁶⁰ Dr. Levy has transcribed these words as בן עירן (Phœn. Stud. part ii. p. 22): but the second letter of the last word seems to me, on a further examination of the tablet, to be unmistakably a *god*, and I adhere, therefore, to the reading of *mana iran*, though unable to explain the expression with any certainty. If I could be satisfied with Dr. Levy's explanation of the phrase ארקה בן זי ארקה, which occurs on so many of the Lion weights in the British Museum, after the specification of the number of minæ, as relating to a standard "of the country," comparing *arqa* with the Chaldean ארקה (for ארצה), then the expression here employed of *mana iran* for the city weight, as opposed to the country weight, would be quite intelligible; but there is no trace upon the tablets, where we have some hundred examples of a specification of weight, of any distinction between a city and a country standard; nor do I think that the corrupted form ארקה was ever substituted for ארצה until long after the age of these inscriptions. I suspect myself that the Phœnician *Arqa* means Assyria—indeed, on one Lion weight, No. 9, ארקה is actually rendered in Cuneiform by 𐎶 𐎠𐎵, the usual contraction for *Asshur*, but whether the term in question was a recognized Aramaic title, the original of the modern عراق (in which case the received Arab etymology must be rejected: see Journ. Asiatique for April, 1839, p. 298), or whether it was a mere local designation preserved in the *Apraxenē* (for *Apraxenē*) of Strabo (lib. xvi. in eunte), I will not hazard a conjecture.

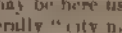

There seem to have been three standards of weight commonly employed in Assyria—two domestic, and one of foreign origin. The domestic standards were based on the "royal" Maund and the "sacred" Maund. The foreign standard is indicated in the Cuneiform text by "the *manah* of Carchemish;" and thus I conjecture to be the בן עירן of the present Phœnician legend, which may possibly have been in general use throughout the cities of Syria, and have thus been known to the Phœnicians by the collective term "the cities," and to the Assyrians by the name of that particular Syrian city with

The chief argument which occurs to me against this reading is, that in the Cuneiform the term of *Mana*, , is never applied to grain. Wheat and barley are measured by the  (which I suppose to be the *homer*, as it applies equally to land), and by fractional parts of the , which are given as , , and .⁶⁴ At any rate, whatever may be the standard employed, the five strokes in the last line but one indicate the number of the greater weight, and the seven strokes at the end the number of the lesser weight, which was represented by the initial letter , perhaps for , *Bath*, the equivalent of the *Ephah*, though applied by the Jews exclusively to the measure of liquids.

I now give the translation of Nos. 11 and 16. The Cuneiform text of the first tablet is as follows:—"3 *homers* upon, "2 *homers* and a fraction upon; in all, 5 *homers* and a "fraction of barley, to be delivered to the king's son, &c., &c." Of the corresponding Phœnician text the only words that remain are "Barley son of the king5" The full Phœnician inscription on the second tablet reads as follows: - "The 5th of the month Khaziran, *Saru-Nerig* being Eponym. "5 *Mans* and 7 *Ephahs* (city weight) of barley to be delivered by "Nébo-irib-an to the son of the king," (*lit.* "of the son of the king "upon Nébo-irib-an").

which they were more immediately connected. I observe, moreover, that there was a specific weight known to the Talmudists as the  *מנה מדינה* (which was the eighth part of the  *זרה צורה*, *Bava kama*, fol 90, col 2, so that we have sufficient authority for the notion of the "city maund," though it is not likely that the older and later weight were the same.

⁶⁴ Upon the legal tablets land and grain are equally measured by the , and this measure appears to have been of 3 standards, which contained respectively 10, 9, and 8 subdivisions, denominated . There are no means of ascertaining the exact relation of these measures to our own, but it seems highly probable that the  was identical with the *Homer* or *Cor* of the Hebrews, and the  with the *Ephah* or *Bath*. It would also seem that with the Phœnicians the  bore the same relation to the , as with the Assyrians, the  bore to the . I have no clue to the phonetic reading of the former, but  and , which in Syllabary No. 158, are identical, are both sometimes explained by *Lagit*, which I suppose to mean "a measure of capacity," being a cognate term with  *לגית*, as a derivative from a root  *לגן* or  *לגנ*, "to measure."

I will only add that  *כנ עירן* may be here used as a compound word in the plural, the construction being literally "city maunds," instead of "maund of the city," for on the weights, wherever the noun is used singly, it is written  *מנה*, *manah*.

No. 17.

This inscription, the last, as well as the longest of the series, is, I think, too imperfect to be read. I have merely added it to the series of bilingual legends in order to complete the collection, and as an exercise for the ingenuity of bolder decipherers.

In continuation of these bilingual readings, I now propose to give a few Phœnician legends from bricks, gems, and pottery, which appear to represent Assyrian or Babylonian names and words, and are thus of some importance to the present inquiry.

No. I.

On many of the Nebuchadnezzar bricks found at Babylon I have observed the word 𐤆𐤁𐤍𐤏, written in bold and clearly-marked Phœnician characters. The forms of the letters so nearly correspond in all the specimens which I have examined, that the legend must, I think, have been impressed with a stamp; and in this case the word, or words, ought, it would seem, to have some meaning of general application. If, then, we read 𐤆𐤁𐤍𐤏, *zebinak*, in one word, we might translate "for sale," deriving the term from the root 𐤆𐤁, "to buy;"¹ or, if we took the initial 𐤆 for the possessive pronoun 𐤅, we might understand, "of the builders," supposing *banak* to be the Babylonian form of ܒܢܐ, and remembering that it is often the custom in the East to assign a certain proportion of the material employed in building to the workmen. Several other explanations might be suggested, such as the name of an evil spirit (compare Arabic زبنيه), to be deprecated by this address,² or

¹ The great difficulty in this word is to explain the final guttural. If Semitic, it may be the suffix of the 2nd person singular; or possibly it may be an Accadian post-position, of which other examples occur. In illustration of the meaning "for sale," we may also remember that the word *eme*, "buy," has been found on many objects dug up at Pompeii.

² So at the present day, in most parts of the East builders keep up a low monotonous chaunt, interspersed with prayers, whilst at their work, which is supposed to have the effect of scaring away the evil spirits, who would otherwise render the edifice unlucky. There is indeed a very large admixture of superstition and "dablerie" in the daily observances of life in Persia and Turkey, which is quite unconnected with Mohamedanism, and must have descended, I think, as a heritage from the old Magian and Chaldean creeds.

[illegible]

Transcript in Hebrew Characters.

| | | | |
|-------|--------------|--------|------------------|
| I. | זבנך | X. | חתם |
| II. | נבתגל תז ? | | פרשנדת |
| III. | כגרת | | בר |
| IV. | הרתגל | XI. | ארתדתן |
| V. | לאכדבן | | למדבר |
| | ברגברד | XII. | לסרגד |
| | סרסא | XIII. | לסעלי |
| | זי הקרב | XIV. | לאחמה |
| | להדר | XV. | להדרקיע בר |
| VI. | דברכ(ת)בל | | הרבעד |
| | סרסא | XVI. | לחנניה בן |
| VII. | לפלתחדן | | וריסח |
| VIII. | לתמכאל | XVII. | לננש |
| | בן מלכם | | לבשה |
| IX. | לעבדאלא | | ברכת |
| | בן שבעת | XVIII. | לסראסר |
| | עבר מתת בן | XIX. | ... ברת לבנן ... |
| | צדקא | XX. | ... משחקן ... |



the mere name of the brick-moulder ; but nothing can be ascertained with certainty.

No. II.

On a brick of Neriglissar's, found at Babylon, the legend upon which I published in the British Museum Collection, Pl 8, No 5, there is another Phœnician inscription, not less difficult of explanation than the last. If the first five characters represent a name, they may possibly be read as **נבתנל**, *Nabu-tagil*, a kindred name with *Ann-tagil*, *Hur-tagil*, &c., and signifying "attached to Nebo," but the third and fourth characters are exceedingly doubtful, and perhaps resemble **נ** rather than **נ**. At any rate, they are too uncertain to furnish ground for etymological speculation ; and to add to our difficulty, the two concluding letters of the legend seem to be reversed. I have given for them the conjectural reading of **נת**, as in No. 15 of the bilingual series, but neither do the forms of the letters suit particularly well, nor is the sense of "this" required, as it would seem, after a proper name.

No. III.

On a minute fragment of a tablet in the British Museum I find the letters **נרת** - - - given as the end of a name, and I can hardly doubt, therefore, that the letters belong to the name of **מלך קרת**, *Melik Qart*, the *Melkarth*, or Hercules of the Phœnicians, which was preceded probably by a noun, like *Abed* or *Ardu*. The use of the Phœnician **ל**, instead of **ק**, in the word **קרת**, "a city," may be compared with the orthography of **מננ** for **מנן** in No 12. The Cuneiform equivalent for the Phœnician *Melkarth* has not yet been discovered, unless it be **𐎶𐎵**, who was the Hercules of Assyria.

No. IV.

On a cylinder seal of Babylonian workmanship which I examined at Baghdad, I found the Phœnician legend **הרתגל**, *Hur-agal*. Now, this is certainly a Babylonian or Assyrian proper name, and the second element is easily identified as the word **𐎶𐎵** or **𐎶𐎵**, "serving," or "attached to," which is so often found in composition with the name of a god ; but I am in some doubt as to the deity who bore the title of *Hur*

or Horus. In the Proto-Chaldean legends the Moon God, who was entitled "*Sin*," in Assyrian, is usually represented by the group $\rightarrow\text{Y}$ $\text{E}\text{H}\text{H}\text{H}$ EH ; and in this group we may be pretty sure that the sign $\text{E}\text{H}\text{H}\text{H}$, which was probably the only phonetic character, had the sound of *Hur*, because in the Syllabary, No. 276, the Accadian equivalent of $\text{E}\text{H}\text{H}\text{H} = \text{E}\text{H}\text{H}\text{H}$ is given for $\text{E}\text{H}\text{H}\text{H}$; and because the name of the city over which the Moon God presided, and which was accordingly expressed by the group $\text{E}\text{H}\text{H}\text{H}$ $\text{E}\text{H}\text{H}\text{H}$ EH , is also repeatedly rendered by the Phonetic characters $\text{E}\text{H}\text{H}\text{H} = \text{E}\text{H}\text{H}\text{H}$, the original of the Scriptural HH and the Greek $\text{O}\text{v}\text{p}\text{in}$.³ It seems very probable, therefore, that the form $\text{H}\text{H}\text{H}\text{H}$ may be the Babylonian reading of the name Y $\rightarrow\text{Y}$ HH EH EH , which was borne by the Eponym for the seventh year of Tiglath-Pileser II.

It is, however, possible that HH , or *Horus*, may represent the Cuneiform HH or $\text{E}\text{H}\text{H}\text{H} = \text{E}\text{H}\text{H}\text{H}$, which was a title borne both by Anu, and by Hercules, (or $\rightarrow\text{Y}$ HH), as already explained; and *Hur-tagal* may thus stand for the name Y HH EH EH , which I have discussed at length under No. 2.⁴

³ For a full account of the "Moon God," the *Hurki* of the primitive Babylonians, and the *Sin* of the Assyrians, see Sect. 8 of my *Mythological Essay*, in Rawlinson's *Herodotus*, vol. i. p. 614. As this essay was written seven years ago, it may be understood to require emendation in some particulars, both of nomenclature and description, the result of a continued investigation of the old mythology; but in reference to "the Moon God," there is really very little to add to my former explanations.

⁴ The name of *Huras*, which, as I have already explained, is in many of the mythological lists, attached to the god *Anu*, when represented under the form of $\rightarrow\text{Y}$ HH , may possibly be a corruption of the primitive title which the god also bears in another list, of EH HH $\text{E}\text{H}\text{H}\text{H}$; and this latter form of *Susu* would seem to be identical with the Vedic *Susaras*, सुस्रवः, and the Zend *Husrava* ("the good hearer"), a curious parallelism being thus afforded to the connexion which has often been remarked between the name of Cyrus or Kūros, and the *خسرو*, *Khusrú*, of Persian romance (see Bournouf's *Mém. sur les Ins. Cun. de Hamadan*, p. 173).

The proofs of a Vedic, or at any rate an Arian, influence on the early mythology of Babylon, which these comparative lists of the names of the gods supply, appear to me to be of the very highest interest, and in many cases to be of undoubted authenticity. For instance, in a list of the names of "the Sun," we have a Turanian group which is thus represented, $\rightarrow\text{Y}$ HH EH EH , and which is explained by the gloss of

The peculiar form of *He*, 𐎶, which is used for the initial character of *Hur-tai-al*, is precisely the same as that employed in the orthography of 𐎶𐎶𐎶 for 𐎶𐎶𐎶 𐎶𐎶 𐎶𐎶, in No. 2.

𐎶𐎶𐎶 𐎶𐎶𐎶, *Mitra*, for 𐎶𐎶𐎶 or *Mithra*. Another compound monogram in the same hat, which it is difficult to represent typographically, is explained by 𐎶𐎶𐎶 𐎶𐎶𐎶, *Isisheba*, and this name I would compare with the Sanscrit *विवस्वन्*, who in Vedic mythology was actually "the

Sun," though in Persian romance his solar character was transferred, as it is well known to his son *Ysun* under the name of *Ymo-khsheeto* (or *Jemshido*, son of *Jirempuan*). That this latter title, also, was well known to the Semites, is shown by Ibn Wahshiya's famous book on Nabathæan agriculture, where *Yamushaed*, or *Jemshid*, appears under the form of *Yanbu-shadh* (يبدو شان) as the name of one of the chief founders of the Babylonian religion, in allusion, no doubt, to the ante-Zoroastrian Monotheism of the Arame, which must have penetrated to the Tigris and Euphrates at a very early date, and was perhaps blended with the native Polytheism.

A farther very curious illustration of the extent to which Aramæan idiom governed the phonetic system of the Assyrians, is afforded by an examination of the name of the god *Hercules*. The name of this deity is usually expressed by the signs 𐎶𐎶𐎶 𐎶𐎶𐎶, which signify, as I now think, "the great or noble God,"

𐎶𐎶𐎶 having the double power of *har* and *mas*, the former of which in this case must represent the Sans. *वृह* Kurdish *farra*, Himl. *barra*, and the latter

the Sans. *महा*, Zend *moz*, Pers. *مس*. It is probable that both of these phonetic names were applied to the god by different tribes or nations in

Babylonia. He was certainly called *Mus*, as we have 𐎶𐎶𐎶 𐎶𐎶𐎶 𐎶𐎶𐎶 in one list given as an equivalent for 𐎶𐎶𐎶 or 𐎶𐎶𐎶 𐎶𐎶𐎶 (whence perhaps

𐎶𐎶𐎶, the son of *Aram* Gen. x. 23), and therefore his title, 𐎶𐎶𐎶 𐎶𐎶𐎶, was used for one of the metals (iron?), in the same way perhaps as *مس* is used in

modern Persian for "copper," and so the sign 𐎶𐎶𐎶, which was probably at first the picture of "a fish," must also, I think, have had originally the phonetic power of *mas*, as it is only by that value that we can explain its representing, 1stly,

𐎶𐎶𐎶 or 𐎶𐎶𐎶 𐎶𐎶𐎶, Heb. *יָם*, "a fish," in old Pers. *ماس*, from

मस्य (as in the *Gā-mās dh* river, so called from the figure of "a bull" and

"fish," sculptured on the rock at its source); 2dly, 𐎶𐎶𐎶 𐎶𐎶𐎶,

Hib. *בַּר*, in old Pers. *مس*, from *महा*, and 3dly, "copper," Proto-

Chaldean 𐎶𐎶𐎶 𐎶𐎶𐎶 𐎶𐎶𐎶, *tamkabbar* (perhaps the original of *ताम्र*);


Assyr. 𐎶𐎶𐎶 𐎶𐎶𐎶 𐎶𐎶𐎶, *aparru*; Avest. 𐎶𐎶𐎶 𐎶𐎶𐎶, *zabur*; Arab. *عَفَر*;

(but in Persian, as before observed, *مس*, now pronounced *mis*).





Whether the other Proto-Chaldean names of the gods, such as "Gingar,"

I read doubtfully as *Bereg-berud*, and suppose it to mean "Blessed of Berud," or "Berud blesses," comparing *Berud* either with the Scriptural **בראדך** for Merodach (2 Kings xx. 12),¹ or with the *Bar Ninre* of Harran, mentioned by St. James of Seruj (Asseman. Bib. Orient. vol. i. p. 327), **ברר** and **נמר** both signifying "spotted as a pard." *Bereg* for *Berek* will be the same corruption that we have already seen in **מננ** for **מנן** **מנן** **מנן**. The Cuneiform sign, I may add, which represents the idea of "blessing," is **𐎶**, the Semitic equivalent roots being **טוב** and **ברך**, and it is thus impossible, when the letter **𐎶** is used alone, to distinguish its phonetic reading. In general, however, **𐎶𐎶𐎶** or **𐎶𐎶**, *ga* or *gi*, is added to **𐎶** to indicate the root **טוב**; and **𐎶𐎵** or **𐎶𐎴**, *ma* or *mu*, is added to indicate **ברך**. The next word, **סרסא**, is, of course, the Hebrew **סרס**, from the root **סרס**, "to castrate." The Assyrian phonetic equivalent seems to be **𐎶𐎶𐎶𐎶𐎶𐎶**. *Kisar*, from **קצר**, "to cut off;" but I am still in doubt as to the Turanian monogram for "a eunuch." The fourth line seems to read *zi haqarib*. The relative **𐎶** is certain, but I am not sure of *haqarib*, as the first letter, though resembling the Hebrew **ה**, is not quite identical. If *haqarib* be the true reading, we may suppose the word to be the Hiphele form of **קרב**, or the first letter may possibly be the Hebrew article. The last word of the inscription is apparently the name of a God, and I conjecture

⁷ It is quite possible that the last element of this name may be ככר, instead of בדר, the second character, indeed, resembles a כ fully as much as a ב, and the *Daleth* and *Besh* are indistinguishable. The name *Burug-bekar* (ברנ בכר) might then mean "the splendour of the morning" (comp. *Undee* באנ and *Meb* מכר), but this is a mere conjecture.

³  is also used for *Berek*, "a knee," as well as for the root בָּרַךְ "to bless." Compare the Biblical phrases —

| | |
|----------|-------------|
| 命多。一。三。江 | 命多。六。金。南 |
| 江。水。 | 六。三。三。 |
| 命多。水。四。平 | 五。二。制。天。分。井 |
| 命。四。 | |

Where the Assyrian reads *allaka birkai*: *ta anikha shepai*, "I have made my knees to move," "I have not rested my feet;"   answering to *birkai*, "knees," and   to *shepai*, "feet."

ture the deity to be the **𐤠𐤠𐤠** of Scripture and **Adad** of Macrobius, though I know not his Assyrian representative.⁹ The style of the legend is very similar to the formula which is generally found on Babylonian cylinder seals, and which merely records the name of the owner, the name of his father, and the name of his guardian deity. The only difference is that here we have the additional title of **𐤍𐤠𐤐**, and that the periphrasis **𐤍 𐤠𐤠𐤠𐤐 𐤠** is substituted for the ordinary single sign **𐤠𐤠𐤠**, *muṣa*, "the slave of."¹⁰

No. VI.

This is a legend in Himyaritic characters, upon a Babylonian cylinder seal obtained by Captain F. Jones at Annah on the Euphrates, and now in the British Museum. It is included in the recent collection of Himyaritic inscriptions published by the British Museum, pl. xviii. No. 39, and has been read by Mr. Franks as **𐤁𐤁𐤓𐤁 𐤁𐤏 𐤀𐤓𐤀**, *Dabrak bin 'Ar'á*. I should, however, propose, myself, to read **𐤁𐤁𐤓𐤁 𐤁𐤏 𐤠𐤓𐤠𐤀**, *Di Barkat-Bil Sarsá*, "of Barkat-bil the Eunuch," comparing the legend with the Phœnician inscription No. V that has been just examined. At any rate it is quite clear that the initial **𐤁**, answering to the Chaldee **𐤁**, is used either as a preposition or a pronoun, to denote the ownership of the seal, this mode of expression being universal in all the cylinder and seal legends; and that the following word is a derivative of **𐤁𐤓𐤁**, "to bless." With regard to the name itself, *Barak*, or *Barkat*, may possibly be used alone, and the following word may be the affiliative term *Bin* as regarded by Mr. Franks; but I should prefer to join the two words together in one name, which

⁹ See Selden de Diis Syris, p. 102 sqq., for a full dissertation upon *Adad*, which, according to Macrobius, signified "one," and was a title of the sun's. Dr. Levy, as I have before observed, reads **𐤠𐤓𐤁** instead of **𐤠𐤓𐤁**, comparing the Hebrew **𐤠𐤓𐤁** (Jer. l. 2), but the first letter of the name seems to me to be a **𐤠** rather than a **𐤠**, and the other two characters are to all appearance the same letter, whether that letter be a *Daleth* or *Resh*.

¹⁰ Dr. Levy can hardly be right, I think, in supposing that a eunuch was "Priest" of Merodach. Except in connexion with the rites of the "Mother of the Gods," I doubt, indeed, if eunuchs were ever admitted into the temples of Assyria and Babylonia. Whether the title derived from **𐤁𐤓𐤁** be *muqrib* or *kaqarib*, it merely indicates "proximity," I think, in the sense of devotion; but there is no immediate correspondent in Assyrian with which the word can be compared. The Cuneiform sign for a priest (of Proto-Chaldean origin) was **𐤠𐤓𐤁**, which was pronounced *Patesi* in Babylonian, and had probably another phonetic equivalent in Assyria.


would then be a compound signifying, perhaps, "the blessing of Bel." At any rate the last letter of the first line can hardly be a *Nun*. It resembles a Phœnician *Zain* more than anything else, but may perhaps be a *Lamed*.¹¹ Whether the two dots after כרך are merely a sign of division, or represent the Himyaritic *Tau*, is of no great consequence.

The reading of טרסא, "the Eunuch," for the last word may be thought very bold, but the first and third letters resemble no character of the known Himyaritic alphabet, and the only Semitic character in which that alphabet is deficient is the *Samech*; so that I venture to compare the word with the title of *Sarad* used in the preceding legend, instead of adopting, with Mr. Franks, the wholly unintelligible patronymic of ערעא. Mr. Franks's hypothesis that the legend on this cylinder is of a much later date than the figures, seems to me to be altogether gratuitous. The figures, no doubt, are of good Babylonian workmanship, and can hardly be later than the sixth or seventh century, B.C.; but I know of no conclusive evidence against a similar antiquity for the Himyaritic character. On the contrary, this cylinder may be held, I think, to establish that antiquity; for not only is there every appearance from the arrangement of the figures and letters that the two engravings must have been executed at the same time, but the style of the legend is also of the Ante-Achæmenian period, and unsuited, as I think, to any later age.

No. VII.




The legend on this cylinder, which is in the British Museum, and comes from Babylon, has been often published (*Mém. de l'Inst.* tom. xvii. l. pl. iii. No. 4, p. 353; and Layard, *Nineveh and Babylon*, p. 608), but has never been satisfactorily read. It appears to me, however, to be a regularly formed Assyrian name, פלתחדן, *Pilat-akh idin*, "Pilat-gives-a-brother," of the same class as *Ashur-akh-idin* (or *Esar Haddon*), *Shamas-akh-idin*, and many others. The only difficulty regards the name of *Pilat*, which is not found under that form in the Assyrian Pantheon. Remembering, however, the constant confusion of the labials, I would suggest that

¹¹ The name of *Birket-Baal*, ברכת-בעל, is quoted by Dr. Levy from a Numidian inscription (*Phon. Stud.* iii. 64). I should prefer, however, to read this name as *Birket Baz*, if I could find any trace of the worship of a god named *Baz* by the Aramæans or Arabs.




Pilat is for *Bilat*, , the feminine of *Bil*, "a Lord," and equivalent to the Greek Βήλις or Βήλοης, the same word occurring as the first element in the name of בלששצר, though the *Te'h* is there substituted for the *Tau*.¹²

The other elements, *akh idin*, require no comment.

NO. VIII.

The seal on which this legend is found is of the Phœnician, or perhaps Arabian, rather than the Assyrian type. The name is distinctly read as מלכם בר תמכאל, *Tamik-il bar Mulkum*. *Tamik-il* means probably "God blesses," or "blest of God;" the root *damak* or *tamak* (for the two forms are hardly distinguishable in the inscriptions), giving rise to a vast number of derivatives in Assyrian, though it is unknown, I believe, in any of the kindred languages. The Turanian sign which represents this root is , and among the derivatives (besides the immediate verbal forms) are the words signifying "good fortune" (, *tumki*, or , *dungi*), the common epithet of *damqdt* ("the blessed places"), applied to the holy shrines of Babylonia, and various others terms of kindred meaning.

The name of מלכם, *Malcam* or *Milcom*, though familiar to us from its frequent employment in Scriptures, is hardly Assyrian,

¹² Dr. Levy reads this name פל-תחרן, and translates it "son of the morning," supposing *Pal* to be the Assyrian , and comparing תחרן with the Hebrew שחר (Phœn. Stud. ii. 83). I know of no Assyrian names, however, formed like the Hebrew בן-שחר, בנימין, בן-אני, &c.; nor, I think, would the word for "a son" be pronounced *Pal* at the commencement of a name, but rather *abla* (Cun. ); whilst the substitution of שחר for תחרן seems exceedingly far-fetched. *Pilat* is, I have little doubt, the name of some deity, but whether it may really stand for *Bilat*, as suggested in the text, or whether it may refer to the "Goddess of life," , *Bilat-Tila*, where *Tila* answers to the Assyrian term *Balath* or *Palath* (comp. Hebrew root פלט or פלת, "to escape," or "survive"), or whether there may not be some other divine title pronounced *Pilat* or *Palat*, the Cuneiform correspondent of which has not yet been recognized, I cannot undertake to say.

¹³ Dr. Levy (Phœn. Stud. ii. 31) reads this name as *Themek-el*, "God supports," from the Hebrew root תמך, and perhaps this is a better derivation than from *damak*, "to bless," which, if it existed in Hebrew, would be expressed by דמק. I am not sure, however, that any such root as *tamak*, "to hold," or "support," is in use in Assyrian.

the termination in 𐤁, being apparently the suffix of the third person plural, which was peculiar to the Hebrew and Arabic.

No. IX.

The seal impressed with this legend, and which is now in the British Museum, is said to have been found in Ireland, a relic, it is supposed, of the old Phœnician colonists. It may be read 𐤏 𐤁𐤕𐤕 𐤁𐤏 𐤔𐤁'𐤀𐤕 𐤁𐤏 𐤔𐤁'𐤀𐤕 𐤏𐤕 𐤔𐤁'𐤀𐤕 𐤏𐤕 𐤔𐤁'𐤀𐤕. *Li Abed-e'd bin Sheb'at ored Mitit bin Zedqa*, "belonging to Abdallah the son of Sheb'at, the slave of Mitinta, the son of Zadek." The names which are thus preserved are of some interest, and may be partially illustrated from the Assyrian. 𐤏𐤕, or *Ela*, would seem to be a particular divinity, different from the ordinary 𐤏𐤕, *El* (Assyrian 𐤏𐤕, *Ilu*, which applies as a generic name to any God. It may, perhaps, be Cronos, the 𐤏𐤕, or 'Ilos, of the Phœnicians, and the 𐤏𐤕 𐤏𐤕, or 𐤏𐤕 𐤏𐤕 𐤏𐤕, of the Assyrians, to which, as before observed, I would propose to give the phonetic value of *Ilu*, after the 𐤏𐤕𐤏𐤕 of Damascus.

Sheb'at, again, is not otherwise known, I believe, as a proper name, but may be explained as applying to the "seven Planets." 𐤔𐤁'𐤀𐤕, is evidently the same as the Cuneiform 𐤔𐤁'𐤀𐤕 𐤔𐤁'𐤀𐤕 (in the genitive), which occurs among the Syrian proper names in the wars both of Tiglath Pileser, and Sennacherib. It signifies merely "the gift (of the Gods)," and may be compared with the 𐤔𐤁'𐤀𐤕 of Scripture (Ezra, x. 43; Nehem. viii. 4, &c. &c.). And *Zedqa*, "the just," cognate with the Scriptural 𐤔𐤁'𐤀𐤕, and 𐤔𐤁'𐤀𐤕, is also met with in the inscriptions under the double form of 𐤔𐤁'𐤀𐤕 𐤔𐤁'𐤀𐤕 𐤔𐤁'𐤀𐤕 𐤔𐤁'𐤀𐤕 and 𐤔𐤁'𐤀𐤕 𐤔𐤁'𐤀𐤕 𐤔𐤁'𐤀𐤕 𐤔𐤁'𐤀𐤕.

" In the Sennacherib Annals (vol. 2, p. 54), 𐤔𐤁'𐤀𐤕 𐤔𐤁'𐤀𐤕 𐤔𐤁'𐤀𐤕 𐤔𐤁'𐤀𐤕, *Zedqa*, is mentioned as Governor of Ascalon; and the name again occurs under the form of 𐤔𐤁'𐤀𐤕 𐤔𐤁'𐤀𐤕 𐤔𐤁'𐤀𐤕 𐤔𐤁'𐤀𐤕, among the witnesses (for the most part Syrians and Egyptians as we may judge from the names 𐤔𐤁'𐤀𐤕 𐤔𐤁'𐤀𐤕 𐤔𐤁'𐤀𐤕 𐤔𐤁'𐤀𐤕, or Sesonchis 𐤔𐤁'𐤀𐤕 𐤔𐤁'𐤀𐤕, or Hemonias &c.) to a deed of sale which was executed in Ascalon, in the fourteenth year of the reign of Sennacherib. *Sennacherib* records the name of *Zedqa*, and his wife *Sheb'at*, concerning their property in Ascalon. We are disappointed to find that *Zedqa* the high law officer or judge. It is quite possible, and even probable, that these two *Zedqas* were the same person; for we find in the Annals that *Zedqa* the Governor of Ascalon, was removed early in the reign of Sennacherib.

Although the owner of this seal was "a slave," he probably filled a position of trust, for there is abundant evidence in the legal tablets that "slaves," under the Assyrian Empire, were allowed to possess property, and were raised to high situations, much in the same way as has always been practised in Mahomedan countries.

No. X.

The cylinder which bears this legend, and which is in the British Museum, is apparently of the Achæmenian period, and the etymology of the names leads to the same conclusion. The inscription may be read, I think, as חתם פרשנדת בר ארתדתן, *Khotam Parshandat bar Artadatan*, "the seal of Parshandat, the son of Artadatan." *Parshandat* I should compare with the פרשנדתא of Esther ix. 7, "given to Parshan," supposing that name to refer to the *Bar-sam* or Hercules, of Armenian tradition, if that be really a genuine title and not a corruption, as has been recently suggested, of the Syrian *Bal-shamin*, "Lord of Heaven," or "the Sun."¹⁵ The other name, "*Artadatan*," would seem to be of pure Persian etymology, being compiled of *Arta* the intensitive prefix, and a verbal noun from the root *dá*, "to give ;"¹⁶ so that the meaning would be

to Nineveh, and was replaced in his government by the very man, *Sharu-tib-dairi*, who sold his town house to the Egyptian judge, as he no longer probably required such a residence after his appointment to Syria. It is not, of course, in our power to determine if the *Zidqá* of the Sennacherib Annals can be identified with the man whose name occurs on this seal ; but there is some colour lent to the hypothesis by the association of the names of *Mitinta* and *Zidqá* in the account of Sennacherib's Phœnician campaign, the former being Governor of Ashdod, while the latter ruled in Ascalon, and the two very possibly, therefore, standing in the relation of father and son, though the fact is nowhere stated.

¹⁵ The subject of *Bar-Sam*, or Βαρσάμιος, is fully discussed in Sect. 9 of my Mythological Essay. See Rawlinson's Herodotus, vol. i. p. 623. Chwolson (*Die Ssabier*, vol. i. p. 373, &c.), connects *Bar-shamin* with *Baál-shamin*, but perhaps the *Bar-shamin* of Mos. Chor. ii. 1-4, may be different from the deified hero, *Par-sham*, or *Bar-sham*, mentioned by the same author in lib. i. c. 14.

¹⁶ The use of the participle דָּתַת, *dátá*, in these names, is proof positive that the seal cannot be of an earlier date than the Persian conquest of Babylon ; and I may here note that the name of בִּלְדָּד, *Bildad*, in Job, a kindred compound, and signifying "Given to Bel," is equally decisive as to the age of that book. All the geographical and etymological evidence, indeed, which can be drawn from the book of Job, tends to assign it to the Achæmenian period, the land of יִזְרְעֵל being the יִזְרְעֵל of the inscriptions

almost the same as the Zend, *Mazda*, "the great giver." There is much difficulty, however, in distinguishing between the 𐤒 and the 𐤓 in this legend, and the letters which I have read as 𐤓 and 𐤓 are not quite satisfactorily determined.¹⁷

The legends numbered XI, XII, and XIV are found upon seals in the British Museum, and No. XIII is a name engraved on a Scarabæus in the same collection.

No. XI I read as 𐤌𐤓𐤁𐤒𐤓, *Li Mudabir*, and I compare the name with the Arabic *مدبر*, *Mudabbir*, "a Governor" or "Director" (from *دبر* or *دبر*, "to lead" or "guide"), which is often used as an honorary title.




No. XII may be read 𐤌𐤓𐤂𐤂𐤂, *Li Sar-gad*, the name being apparently of the same class as 𐤓𐤕𐤁𐤕 or 𐤓𐤕𐤁𐤕 𐤓𐤕𐤁𐤕 𐤓𐤕𐤁𐤕, which I have examined under No. 14. *Sar-gad* probably signifies "of glorious fortune," or "(his) fortune exults;" *Sar* being a derivative either from 𐤓𐤕𐤁𐤕 or 𐤓𐤕𐤁𐤕 as before explained, and *Gad*, being the Scriptural 𐤒𐤂 (Is. lxv. 11, which, however, although certainly used in Hebrew for "fortune," is not, as far as my knowledge goes, to be found in the inscriptions¹⁸



The name of 𐤓𐤕𐤁𐤕, which belonged to the owner of the Scarabæus, No. XIII, is probably cognate with the Hebrew 𐤓𐤕𐤁𐤕, *Saul*.

(𐤓𐤕𐤁𐤕 𐤓𐤕𐤁𐤕 𐤓𐤕𐤁𐤕), between the Jebel Shanar and the valley of the Euphrates, and thus extending from the Sabæans of Idumæa on the one side, to the Chaldeans of Southern Babylonia on the other, and the Shulites and Temanites being the Babylonian tribes of 𐤓𐤕𐤁𐤕, *Sakhi*, and 𐤓𐤕𐤁𐤕, *Damoni*, who at the close of the Assyrian Empire were settled along the outskirts of the desert.

¹⁷ Dr. Levy (*Phon. Stud.* ii. 40) gives these names as 𐤓𐤕𐤁𐤕 and 𐤓𐤕𐤁𐤕, *Artadati* and *Godshiri* but there is nothing in his remarks which seems to me to lend much weight to his proposed readings. I refer at any rate, regarding the first letter of the first name as a *Phe* rather than a *Gimel*, and the other which is fourth in that name, and last in the second name, certainly resembles a *Vav* more than a *Jod*.




















¹⁸ It must be evident to any one who is familiar with the Assyrian inscriptions and especially with the bilingual tablets, which treat to a great extent of demonology, that the celebrated verse in Isaiah, lxxv. 11 where the authorized version renders 𐤌𐤓𐤂𐤂𐤂, "for that troop," and 𐤌𐤓𐤂𐤂𐤂, "unto that number," refers in reality to the "good and evil spirits" who were propitiated and

and with the Cuneiform , which was the name of the King of Hamath, contemporary with Shalmaneser II., of Assyria, and with the Biblical Jehu and Ben-Hadad.  and , indeed, in Hebrew are kindred roots, and in Assyrian the *Ain* and *Atif* are hardly distinguishable.

In No. XIV the name , *Akhi-umai*, is probably for *Akhi-umai*, "mother's brother," or "uncle," formed in the same way as the Hebrew , *Ahab*, which is literally "father's brother." I have not met, however, with any direct Assyrian correspondent.

No. XV.

The impossibility of distinguishing between the *Resh* and the *Daleth* renders very uncertain the explanation of this legend which is found on a seal probably of Syrian origin. The analogous legend, No. IV, which I have read as *Hur-tagil*, would suggest, indeed, the reading of *Li Hur-daqui'a bar Hur-b'ad*, the name of *Hur* or

deprecatd by the Babylonians. Spirits or genii in general are indicated by the ideographic signs , or , or , or by the phonetic terms , *sh'edu* (comp. ), or , *vadukku*, or , *lamassi*, or perhaps , *Nukku* (comp. , &c.); but the distinguishing marks for "good" and "evil," or for "blessing" and "cursing," are  for the former, to be read as *damiq* or *damqu*, and  for the latter, to be read as *lirnu* or *limnu* ( or ). Comp. E.I.H. Ins. col. 9, l. 38; Bellino Ins. of Neb. col. 2, l. 2, &c., &c., &c. It follows, then, that the Hebrew  will answer to the Bab. , and the Hebrew  to the Bab. ; and it is thus not a little curious that the latter Hebrew word, for which it is very difficult to find a suitable etymology, gives us the exact phonetic reading of  or , *Limnu* (in oblique case). I hardly think this can be a mere coincidence, and yet, if the Assyrian word were used in Isaiah for the "evil" spirits, it is difficult to understand why it should not be used for the "good" spirits as well; and there is certainly no word that I am aware of, connected with the Assyrian demonology, which at all resembles *Gad* or *Ligad*.

Horus forming the initial element in both the names; but in this case no fitting etymology can be found, as it seems to me, for *dug'a*, the root דקע being unknown to any Semitic language. I prefer, therefore, reading the first name as *Hud raq'a*, "the glory of the firmament;" דר, for the Hebrew דוד, being equivalent to the Proto-Chaldean 𐎠𐎵, which represents any derivative from the root נדר, "to swell," or "to be proud," and the second element being the ordinary word רקיע, "the expanse of Heaven," or "the firmament." I would still, however, propose to read the second name as *Hur-b'ad*, "the slave of Horus," דר standing for the god of that name, and בעד being by metathesis for עבד, "a slave," and in substitution of the usual Phœnician contraction into בר, *Bod*.¹⁹

No. XVI.

This legend occurs on a seal in the British Museum, which is believed to have been found in Babylonia. It seems to read חנניה בן דיסה, *Li Khananiah bin U'disah*. *Khananiah*, the Greek Ἀναβας ("whom God has graciously given"), is a well known Semitic name, though I believe it has never yet been recognized in a Phœnician inscription. 𐤏 𐤍 𐤕 𐤕, *Khananu*, for חנון, is used also in the Cuneiform inscriptions as the name of a

¹⁹ Dr. Levy, I see, gives this same reading of *Hod rakia* (*Phœn. Stud.* ii 30), but doubtfully; while he reads *Hod-bad* instead of *Hur-bad*, deriving the last element from the Heb בעד, and translating the name by "Pracht ringsum," whatever that may mean.

Dr. Levy, also (*Phœn. Stud.* i. 38), gives another Phœnician legend from a plate of Layard's (*Carte de Mithra* 36 No 3), which furnishes us with a name analogous to that of *Hod-rakia*. I have been unable to find in the British Museum collection the vases or figures figured by Layard but the legend would seem to read ל הור כספר *Li Hud kaspar*, and I should conjecture the name to mean "the glory of Caspar." It is true that we have no evidence in the inscriptions of such a placative name attaching to any of the gods, but in the Nodun's list there is a certain 𐎠𐎲𐎠𐎵, which seems to be

𐎠𐎲𐎠𐎵 𐎠𐎲𐎠𐎵, as he is called الخبير الشامل, "the omniscient," or "of complete intelligence," and this may possibly be the origin of the name of *Caspar* or *Gaspur*, which has been prevalent in the East from the earliest times. Dr. Levy reads the name *Hudu, the doer*, supposing the stroke after the fifth letter to mark a division between the words, and regarding ספר as a title. The root ספר, to write, however was certainly unknown in Assyrian and I should prefer, therefore if Dr. Levy's division of the words were correct, to translate "the glory of Sippara," comparing ספר with the Cuneiform 𐎶𐎶𐎶𐎶.

King of Gaza, contemporary with Sargon, though the root is rarely or ever employed in Assyrian phrases. Of the etymology of 𐎶𐎵𐎶 , *Udisakh*, I cannot speak with any certainty, since it does not resemble either a Hebrew, or an Assyrian, compound. The first element, however, probably comes from 𐎶𐎵 , "to praise," and the second may be allied with the Arabic سَخ and Assyrian 𐎶𐎵𐎶 , the whole name signifying "the praise of the liberal."

No. XVII.













This legend is found on a seal in the British Museum, which is to all appearance of Babylonian manufacture. It may be read, I think, as ל ננ ש לבשה ברכת , *Li Nana-sha-labshahu-birkat*, and the name may be, perhaps, translated "whom Nana has clothed with blessings." The name, at any rate, of the goddess *Nana*, 𐎶𐎵 𐎶𐎵𐎶 𐎶𐎵𐎶𐎵 𐎶𐎵𐎶𐎵𐎶 in Cuneiform, *Nanaia* in Greek, and ناني , *Nani*, in Syriac, is not to be mistaken, and the last word, of which the final letter is alone doubtful, is certainly a derivative from ברך , "to bless." What the other words may be is more uncertain. The 𐎶 which follows *Nana*, and completes the first line, may very well be the relative, which was extensively used in the Phœnician and Hebrew, as well as in the Assyrian (see *Ges. Lex. in voce*),²⁰ and the next word is assuredly a verb; but I know not whether the final 𐎶 be a more feminine termination of the participle, or the suffix of the third person masculine singular (in Assyrian 𐎶𐎵 or 𐎶𐎵𐎶), or the article which belongs to the following noun. This point, then, I leave to the consideration of more competent scholars. I have not met with any exact correspondent of the name in the inscriptions, but it is formed in near accordance with the principles of Assyrian construction.










No. XVIII.

Gesenius gives the legend of 𐎶𐎶𐎶𐎶𐎶 , *Sar-asur*, from an Assyrian gem in the Museum of the Hague, and translates "Prin-


















²⁰ It would seem, however, that 𐎶𐎵𐎶𐎵𐎶𐎵𐎶𐎵𐎶 , *sakh*, and 𐎶𐎵𐎶𐎵𐎶𐎵𐎶𐎵𐎶 , *sakh*, are not Semitic, but Turanian roots, answering to the Assyrian *damik*, "to be fortunate," and allied, therefore, in all probability, with the old Persian word سَخ , *sakh*, "auspicious," rather than with the Arabic سَخ *sakhâ*.

^{20a} Or the 𐎶 may be the characteristic of the Shaphal conjugation, *shalbakh* being constantly used in the inscriptions for "clothing."

ceps Osiridis." I do not, however, exactly understand this phrase, nor do I think it at all probable that the worship of Osiris should be commemorated on an Assyrian seal. I should rather translate "the glory of Asshur," or "Asshur is glorious," supposing סראשר to be the Phœnician rendering of אֲשֻׁר   ; and comparing the name with the compounds סראש (Cun. אֲשֻׁר   ) and סרגר, which have been before examined. סר, indeed, will stand for שֶׁאֵר (that is, אֲשֻׁר   , phonetic equivalent of אֲשֻׁר) as well as for שֶׁר; and we have an undoubted example of the substitution of אֲשֻׁר for the God Asshur (   or אֲשֻׁר) in the ordinary Scriptural orthography of אֲשֻׁר־הַדִּין for the name of Esar-Haddon, which in Assyrian is *Ashur-akh-iddina*, "Asshur has given a brother."

The legends XIX and XX are found on pieces of coarse pottery, fragments of a jar, which were excavated from the ruins of Nimrud, and are now in the British Museum. One fragment seems to read ברת לבנון, *Biret Libnan*, "within the Lebanon," the first word being the Cuneiform   or   , which has no immediate correspondent in the other Semitic languages, but is used like the Hebrew בֵּין and Arabic بَيْنَ, and the other being the well known geographical name which in the Inscriptions is usually written as    , *Libnana*, answering to the Hebrew לְבָנוֹן. The other fragment reads as ---- מִשְׁחָקָן ----, but I cannot venture on an explanation, as the words are probably imperfect, both at the commencement and the end.

Before concluding my notes on these tablet and seal legends, I would observe that they are among the most ancient specimens that we possess of Phœnician writing. I should select as the

²¹ This is the same word which occurs in the Babylonian transcript at Behistun, line 8, as equivalent to the Persian *astara*, "within." Mons. Oppert is wrong (*Exp. en Mesopotamie*, iv. p. 203) in identifying the letter   , which occurs in the word in question, with either the Assyrian    or   . The true equivalent in the Assyrian alphabet is    , which, again, as has been often shown, interchanges with    , and that letter, amongst its various powers, has the value of *rit*.

to me, have been scratched or incised by some foreign subordinate in the Registry Office.

At the same time, the Phœnician letters were certainly not altogether unknown to the learned Assyrians, for there are a considerable number of fragments of clay tablets among the Museum collection, which, when complete, must have borne tabulated lists of the Phœnician alphabet, and which, as far as can be ascertained from the mutilated remains now alone available for examination, gave some mystical explanation of the powers and properties of the different characters.

Through what means, or at what particular time, the Cuneiform character fell into disuse, and was superseded by a curvate square character of the Phœnician type, we are unable at present to define with any certainty. The latest dated tablets, however belong to the reigns of Antiochus and Demetrius; and as a great political revolution occurred shortly afterwards, the Greek rule in Assyria and Babylonia being supplanted by the Parthian, we may probably assign to that epoch the extinction of Cuneiform writing.

A square character, it is true, must have been long previously known in Babylonia, through the coins of the Achæmenian satraps, and it was from this character, probably, that the numismatic Bactrian took its rise in the third century B.C., but it may be doubted whether that form of writing ever fairly struck root in the country along the Tigris and Euphrates. The only specimens, at any rate, which now exist, are in a cave at Amadia, and upon the rock at Holwan; and at both places the inscriptions are found in connection with very early Parthian sculptures. It would be interesting, on many accounts, to trace the successive establishment of the various later forms of Semitic writing which took the place of the Cuneiform. The Palmyrene, the Parthian of the Bilingual tablets, the Chaldæan of the Babylonian Pateræ, the Pehlevi, the early Estranghelo, and the Sabæan of the leaden rolls from *Abu Shadhr*, are all more or less connected, and several of these alphabets were in use, no doubt, at the same time, in various parts of Assyria and Babylonia. A full comparative table of all such alphabets would be very important to the palæographer, while it would also assist the historical student in showing how the civilization of the Cuneiform period became modified and affected by the successive introduction of foreign influences, as evidenced by the modes of writing which severally accompanied them, until the heterogeneous mixture

of ignorance and knowledge, of philosophy and superstition, of empiricism and science, which prevailed in Babylonia during the early ages of Christianity, was eventually swallowed up in the overwhelming energy of the Arab element, and the impetuosity of a new-born and proselytizing faith.

ADDITIONAL NOTES.

Note 4, page 190.—On a further comparison of the texts it seems almost certain that *tadan* or *tadani*—for both orthographies are employed—must be the 2nd person sing. of the Aorist of Kal, the root being probably *danah*, immediately cognate with *nadan* (as נָתַן in Hebrew is with נָתַן), and being thus represented by the same Turanian ideograph, . These tablets, however, which contain “decrees,” as it would seem, rather than mere contracts, addressed by the *Aba*, or “Judge,” to the parties who come before him to legalize their conveyance of property, are very difficult to render in intelligible English, not only from the frequent employment of technical terms, but from the strange grammatical construction in which the conditions of sale and barter are expressed. The two words *taqabbí* and *tasatthiri*, which I have quoted from the decree of a certain princess, the daughter of the last king of Assyria, are probably the 2nd person sing. fem. of the Aorist of Piel, and hardly admit, therefore, of direct comparison with *tadani*.

Page 207, No. 5.—In reference to the possible comparison of the second line of the Phœnician legend on this tablet with the Cuneiform name it may be of importance to note that if the first element of that name be composed of a double *ti* ()—as appears to be the case—the phonetic reading will probably be *Igarát-nahid*, being explained in the bilingual vocabularies by as some part of “a ship.” The Phœnician letters, then, which I have doubtfully read as *zarád*, may perhaps belong to this word *igarád* or *igarát*; and the second element of the name, *nahid*, may have been broken off from the tablet, which is here imperfect.

[illegible]

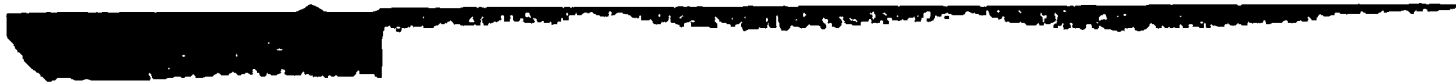


[illegible]



Handwritten text in a South Indian script, likely Grantha or Tamil, on a palm leaf manuscript. The text is arranged in approximately 15 horizontal lines. The leaf shows signs of age, including discoloration and a small circular hole on the left side. The script is finely inscribed and appears to be a form of classical South Indian writing.







JOURNAL

OF

THE ROYAL ASIATIC SOCIETY.

ART. X.—*Translations of Three Copper Plate Inscriptions of the Fourth Century, A.D., and Notices of the Châlukya and Gurjjara Dynasties.* By Professor J. Dowson, Staff College, Sandhurst.

[Read March 21, 1864.]

IN the year 1837, Dr. A. Burn transmitted to Mr. James Prinsep, then Secretary of the Asiatic Society of Bengal, transcripts and facsimiles of four Copper Plate Inscriptions. "These plates," he said, "were found in the town of Kaira, about ten years ago. The river *Watrua* runs close to the walls on the north-west side, and was the cause of the discovery, by washing down the walls and earth. They had been handed about the country among the natives for translation, it being supposed they were connected with some deposit of treasure. At last they were brought to me by a *fakir*, of whom I purchased them."¹

These plates proved to be of great archæological value, for three of them being dated both in words and figures, they furnished a key to the value of the old Sanskrit numerals. Much pleased with the discovery of this fact, Mr. Prinsep published fac-similes and explanations of the dates,² and followed up the clue thus placed in his hands with characteristic ardour.

In October, 1838, after Mr. Prinsep had left India, a transcript and a partial translation of one plate was published,

¹ Journal Beng. As. Soc. vol. vii. p. 908. Thomas's Prinsep, vol. i. p. 262.

² Beng. J. vol. vii. p. 348. Thomas, vol. ii., p. 70.

and in the following month a complete transcript and translation of another was issued.¹

Upon Dr. Burn returning home he presented to the Royal Asiatic Society the original plates of three of these inscriptions—those referred to as Nos. 2, 3, and 4 by Mr. Prinsep,—in fact, the doubly dated, and therefore the most valuable of the series. Fac-similes of the three plates were soon afterwards lithographed : but no one having up to the present time prepared translations, they have remained unpublished. I now propose to offer transliterations and translations of the three records.

Of the three inscriptions, the one which is here numbered "2" is that of which a transcript and a partial translation have been already published as above stated ; the other two have received no notice beyond Mr. Prinsep's explanation of their dates. Much confusion has hitherto prevailed in the references to the numbers of these plates, from two different series of numbers having been employed in the *Journal of the Asiatic Society of Bengal*. The numbers appended to the fac-similes now published accord entirely with the numbers used by Mr. Prinsep in his first paper, that on the dates (vol. vii. p. 348). The translation which came out subsequently (ib. p. 908), and which is said to be of "No. 4," is in reality "No. 2," and that at p. 966, which is called "No. 1," ought to have been numbered "4," for it had not been noticed in the first paper. This last, moreover, is the one which is absent from the present series.

The three plates now published were, as it would seem, found together ; and although they are records of grants made by kings of different dynasties, they appear to have had a common object, and present some curious points of similarity and connection. Their dates are included within a period of fourteen years (Samvat 380 to 394), and they are grants made, like many others, for the due performance of the Bali, Charu, Vaiṣwadeva, Agnihotra, and the five great sacrifices. So far, then, they are in agreement. A closer examination proves a much closer identity of origin. No. 1 is a grant by a Chā-

¹ *Beng. J.* vol. vii. p. 908, 966. *Thomas*, vol. i. pp. 257, 263.

lukya king, Nos. 2 and 3 are grants of a Gurjjara dynasty : but a comparison of the names of the grantees proves them to be identical;¹ and there can be no doubt that the grants were made by two contemporary dynasties, for the same purposes and to the same individuals. Further, Nos. 2 and 3 agree word for word throughout excepting only in the dates and in the names and other particulars of the grantees. From death or some other reason the number of grantees is considerably reduced in the later document, which can only be looked upon as a cancel of the original grant. No. 1 is the latest in date, and is a palimpsest. Traces of engraving on the backs of its plates are visible, and many of the letters are legible, but no complete word has been read with the exception of the date. The original record has been so hammered and filed as to leave nothing more intelligible. The words *Chaturmnarati* (94), *Samvatsara*, *Vaiṣākha*, and the numerals ३३५ 394, somewhat differently formed from those in the reproduced record, may however be confidently picked out. Until I succeeded in making out the date, I was disposed to think that the first copy had been cancelled with the same object as that which led to the supersession of the earlier of the above noticed grants, viz., a change in the names of the grantees. It is just possible, but scarcely probable, that such may have been the reason. With no hint to guide us, it is futile to form any conjectures as to the cause of the abrogation of the first document. We may assume the later document to be a rectification of its predecessor, but such rectification may have been rendered necessary by a great variety of reasons—from the blundering of a conveyancer or engraver to the death of a king.

Taking these documents together, it seems clear that the Chalukya and Gurjjara dynasties favoured the same individuals and were actuated by the same objects. The inference may therefore be fairly drawn that amity existed between them, and that their dominions were contiguous. The locality of

¹ There are some variations in the orthography of the names—thus, the *Tuṣiṣura* of one is doubtless the *Tuṣiṣura* of the other. Such uncertainty in the spelling of vernacular names is common in inscriptions.

the lands granted is sufficiently clear. The town of Jambosara (Jumbooseer) is mentioned in the grants, and the plates were all found together at Kaira, so that in all probability the lands were near these towns, most probably in close contiguity to the former.

Some doubt has hitherto been felt as to the era in which these plates are dated.¹ Was the "Samvatsara" that of Vikramāditya or that of Ballabhi? Between these two eras there is a period of 374 years, so that if the inscriptions are dated in the former they belong to the middle of the fourth century A.D., but if in the latter they will come down to the beginning of the eighth century. The grants are certainly contemporary, so that to decide the era of one is to settle that of all. This may be satisfactorily done by means of grant No. 1. There is good evidence, as will be presently shown, that Pulakesi, a Chālukya monarch, and a successor of the Jaya Sinha of this grant, was reigning in A.D. 489. This fact puts the Ballabhi era entirely aside.

GRANT NO. 1.—CHĀLUKYA DYNASTY.

The first grant was made, as has been stated, by a Chālukya king, and is the earliest of that dynasty which has yet come to light. The history of this dynasty has hitherto been almost the exclusive property of Mr. Walter Elliot, of the Madras Civil Service, who collected some hundreds of inscriptions relating to the dynasties of the south, transcripts of which he deposited in the Library of the Society.² The historical results deducible from these Inscriptions he published in a valuable paper printed in vol. iv. of the Journal. Returning to India he still prosecuted his researches, and in 1858 he put forth in the Madras Journal a paper of "Numismatic Gleanings," which contains some important additions to the history of the Chālukyas. These are so necessary for our present purpose that no apology is needed for transferring to our columns that portion of the paper which relates to the

¹ See Table of Inscriptions in the Index of the Jour. of the Ben. A. S. p. 200.

² There are some notices of the Chālukyas among Mr. Wathen's Inscriptions, published in vols. ii. iii. iv. and v. of the Journal; but these in all probability had come under the notice of Mr. Elliot before he published his memoir. See particularly vol. ii. p. 380, and vol. v. p. 343.

Chálukyas as supplementary to his chief paper on the subject in the Journal of the Society:—

“Previous to the arrival of the first Chálukya in the Dakhan the Pallavas were the dominant race. In the reign of Trilochana Pallava, an invading army, headed by Jaya Sinha, surnamed Vijayáditya of the Chálukya-kula, crossed the Nerbudda, but failed to obtain a permanent footing. Jaya Sinha seems to have lost his life in the attempt, for his queen, then pregnant, is described as flying after his death and taking refuge with a Brahmin called Vishnu Somayáji, in whose house she gave birth to a son named Rāja Sinha, who subsequently assumed the titles of Rana-rāga and Vishnu Vardhana. On attaining to man’s estate, he renewed the contest with the Pallavas, in which he was finally successful, cementing his power by a marriage with a princess of that race, and transmitting the kingdom thus founded to his posterity. His son and successor was named Pulakeśi, and his son was Vijayáditya II. A copper *śāsanam*, recording a grant made by Pulakeśi which bears date s.s. 411 or A.D. 489, is extant in the British Museum. The next prince was Kirtti Varma, who left two sons, the elder of whom, Satyāśraya, succeeded him in the kingdom of Kuntala-deśa, the capital of which was Kalyān, a city still existing under the same name, about one hundred miles west and a little north of Hyderabad; while the younger, Kubja Vishnu Vardhana or Vishnu Vardhana the Little,¹ established a new seat for himself in Telingana by the conquest of Vengipuram, the capital of the Vengi-deśam, which comprised the districts between the Godavery and the Krishna below the Ghats. This event appears to have taken place about the end of the sixth or the beginning of the seventh century.

“The two families ruled over the whole of the table-land between the Nerbudda and the Krishna, together with the coast of the Bay of Bengal from Ganjam to Nellore, for about five centuries.² The power of the Kalyān dynasty was sub-

¹ The word *kubja* properly signifies “crooked” or “hunch-backed”

² Dating from the first conquest of Rāja Sinha, the whole period would be seven centuries, but there is some chronological obscurity about the earlier princes of the series which we hope to clear up hereafter.

verted for a time in the end of the ninth or beginning of the tenth century, and the emigrant prince or his son succeeded by marriage in A.D. 931 to the throne of Anhalwâra Pattan in Guzerat, which his descendants occupied with great glory till A.D. 1145.¹ But in A.D. 973 the dynasty of Kalyân was restored in the person of Tailapa Deva, and ruled with greater splendour than before till its extinction in A.D. 1189 by Bijjala Deva, the founder of the Kalabhuriya dynasty.²

“The junior branch extended their territories northwards from Vengi to the frontiers of Cuttack, and ultimately fixed their capital at Râjamahendri, the modern Rajahmundry. More than one revolution appears to have occurred in the course of their history, but the old family always contrived to regain its power, until the kingdom passed by marriage to Râjendra Chola, the then dominant sovereign of Southern India, in whose person the power of the Cholas had reached its zenith. Whether the acquisition of Telingana was due entirely to inheritance or to the joint influence of force cemented by matrimonial alliance, is not clear. The fact, however, is certain, that the Chola power was established in the eastern Châlukya territories for upwards of a century and a half, and has left permanent traces of its existence. Râjendra Chola was succeeded by his son Vikrama Deva, surnamed Kulottunga Chola. On the death of his uncle Vijayâditya, who had been viceroy of Vengi-deṣam, the king deputed his son Râja Râja to assume the office; but after holding it for one year, A.D. 1078, he resigned it in favour of his younger brother, Vîra Deva Chola, who assumed the title of Kulottunga Chola. His grants are found in great numbers from A.D. 1079 up to the year 1135, when a partial restoration of the Châlukya line appears to have taken place, and they maintained a feeble and divided influence till the latter part of the twelfth century, when the country fell under the sway of the Kakatiya dynasty of Warangal.³

“To assist future inquiries in assigning the coins of the

¹ Tod Ann. Rajasthan, where the Anhalwâra family is styled both Solanki and Châlukya, pp. 80 and 97.

² Journ. R.A.S. vol. iv., p. 17; and Madras Journ. Lit. and Sc. vol. vii. p. 209.

³ The earliest inscription of the Kakatiyas that has been met in Vengideṣam, now the Northern Circars, bears date A.D. 1175, the latest 1336.

Chālukya race to their proper authors, a list of the sovereigns of both branches is subjoined :—

1. Jāya Sinha, Vijayāditya.
2. Rāja Sinha, Raṇa Rāga, Vishnu Vardhana.
3. Vijayāditya II.
4. Pulakeṣi, A.D. 489.
5. Kirtti Varma I.
6. Mangaliṣa.

Kirtti Varma had two sons, of whom the former, Satyāśraya, succeeded his father and uncle (who seems for a time to have usurped his rights) as the representative of the Kalyāṇ branch, and from him that line has been called the Satyāśraya Kula, while the latter Vishnu Vardhana the Little (*Kubja*) was the founder of the Rājahmundry dynasty.

WESTERN LINE.

7. Satyāśraya began to reign A.D. 609.
8. Amara.
9. Āditya.
10. Vikramāditya I.
11. Vinayāditya, Yuddha Malla, began to reign A.D. 680.
12. Vijayāditya III. began to reign A.D. 695.
13. Vikramāditya II. began to reign A.D. 733.
14. Kirtti Varma II.
15. Kirtti Varma III., cousin of the last, A.D. 799.
16. Tailapa.
17. Bhīma Rāja.
18. Ayya or Kirtti Varma IV.
19. Vijayāditya IV.
20. Taila Bhūpa II. or Vikramāditya III., in A.D. 973 restored the monarchy which had been for some time usurped by the Ratta Kula. He died A.D. 997.
21. Satyāśraya II. Irivi Bhujānga Deva, A.D. 997.
22. Vikramāditya V. began to reign about A.D. 1008 (?)
23. Jaya Sinha Deva, Jagadeka Malla, about A.D. 1018 (?)
24. Someśwara Deva I., Trailokya Malla, Āhawa Malla, about A.D. 1040.
25. Someśwara Deva II., Bhuneka Malla, A.D. 1069, expelled by his brother.

26. Vikramāditya VI., Kāli Vikrama, Tribhuvana Malla, in A.D. 1076.
27. Someswara Deva III., Bhūloka Malla, A.D. 1127.
28. Jagadeka Malla, A.D. 1138.
29. Tailapa Deva III., Trailokya Malla, A.D. 1150.
30. Someswara Deva IV., Tribhuvana Malla, A.D. 1182.
Dethroned by Bijjala Deva of the Kalabhuriya line.

EASTERN LINE.

1. Vishnu Vardhana II., or Kubja Vishnu Vardhana, conquered Vengi A.D. 605.
2. Jaya Sinha I.
3. Indra Rāja, his brother.
4. Vishnu Vardhana III.
5. Manga Yuva Rāja.
6. Jaya Sinha III.
7. Kokkili.
8. Vishnu Vardhana IV. } Brothers.
9. Vijayāditya I.
10. Vishnu Vardhana V.
11. Narendra Mriga Rāja.
12. Vishnu Vardhana VI., or Kāli Vishnu Vardhana.
13. Vijayāditya II., or Guna Gunānka Vijayāditya, conquered Kalinga.
14. Chālukya Bhīma I., his brother.
15. Vijayāditya III., or Kollābhiganda Vijaya.
16. Amma Rāja.
17. Vijayāditya IV., or Kandagachita Vijaya.
18. Tālapa. Usurper.
19. Vikramāditya V., the son of a brother of Amma Rāja I.
20. Yuddha Malla.¹
21. Rāja Bhīma II.
22. Amma Rāja II.
23. Dhanārṇava. Interregnum of twenty-seven years.
24. Kirtti Varma, son of Dhanārṇava.
25. Vimalāditya, his brother.
26. Rāja Rāja Narendra.

¹ Some accounts make Yuddha Malla the son and successor of Tālapa, and expelled by Vikramāditya V.

27. Rājendra Choḷa.
28. Vikrama Deva Kulottunga Choḷa.
29. Rāja Rāja Choḷa, viceroy for one year.
30. Vīra Deva Kulottunga Choḷa or Saptama Vishnu Vardhana. Viceroy from A.D. 1079 to 1135.

"The Chālukyas were of lunar race, and apparently worshippers of Vishnu. The fact of Rāja Sinha having been educated by Vishnu Bhaṭṭa Somayāji, a Vaishnava Brahmin, probably tended to confirm the attachment of the family to this creed. Their style and titles are as follows: Chālukya-kula; Mānavyasa-gotra; Hārīti-putra, whose royal power was the gift of Kauṣika; nourished by the seven mothers, worshipping Swāmi Mahāsena; having the boar signet (lāṅchhana) the gift of Bhagavān Nārāyaṇa. The insignia of royalty are elsewhere described as consisting of

| | |
|--------------------|--------------------|
| The white canopy | Śwetātāpatra. |
| The conch shell | Śankha. |
| The naubat | Pancha-mahā-śabda. |
| The plough ensign | Halaketana. |
| The drum | Dhakka. |
| The boar signet | Varāha-lāṅchhana. |
| The peacock fan | Mayūra-pinchha. |
| The spear or mace | Kunta. |
| The throne | Sinhāsana. |
| The royal arch | Makara-toranam. |
| The golden sceptre | Kanaka-daṇḍam. |

But in the inscriptions recorded when they were at the height of their power, the white canopy, the boar signet, the peacock fan, the royal mace, and the golden sceptre only are mentioned. Of these, the boar ensign was the most celebrated, and was the symbol invariably represented on their money and on their seals, sometimes in the latter accompanied by the conch shell, the drum, the peacock fan, and other insignia not enumerated above, as a lotus, an *ankuṣ* or elephant goad, candelabra, a seat or stool (?) the *swastika* cross, etc.; and on those of later date a sword.¹

¹ It is not clear whether the sword was ever assumed by the true Chālukyas or only adopted by a succeeding dynasty.

"Considering the extent and long duration of their power it is extraordinary that their coins are not more frequently met with. Those represented in plate I. (thirty-four in number) contain the whole that have fallen in my way during the twenty-five years that I have been inquiring for them. I have, however, heard of several specimens which have not come under my own eye."

It thus appears that the earliest date known to Mr. Elliot was that of Pulakesi in Saka 411 (A.D. 489). This date was obtained from a copper-plate in the possession of Captain Jervis, and of which a transcript and abstract translation was published by Mr. Wathen in the Society's Journal.¹ This grant and the inscription from Ye-ur which Mr. Elliot gives at length² are the most important of his authorities. The latter inscription was found upon an upright stone in a temple at Ye-ur in the Nizam's territories, and the genealogy it contains professes to have been copied from a copper plate. The last name it records is that of Tribhuvana Malla, No. 26 in the above list, who was reigning in A.D. 1076.

Upon the above authority, the rise of the Chálukya line has hitherto been placed in the early part of the fifth century; but the inscription now translated, being dated in 394 Samvat, or 338 A.D., and being a grant made by the third of the line, the origin of the Chálukya dynasty must be referred to the very beginning of the fourth century after Christ, perhaps even it may be carried back to the third century.

Jaya Sinha, the first named in this grant, is always recognized as the founder of the dynasty. The grant of Pulakesi and the inscription of Ye-ur both declare the fact, and it may be considered certain. The names of his two successors, Buddha Varmā (son), and Vijaya Rājā Sarvva (grandson), which we find in this grant, have not been met with in any other record, unless indeed the latter can be identified with the Vijayāditya No. 3 of Mr. Elliot's list. The date of this grant being 338 A.D. a period of about two hundred years intervenes between Jaya Sinha and the grant of Pulakesi in 489, and

¹ Vol. v. 343.

² Vol. iv. 38.

to fill up this period Mr. Elliot gives only three names, Pulakesi standing fourth in the list. There is here a manifest deficiency; if the dates are right other names must have intervened: there can therefore be little hesitation about introducing those which the present inscription supplies. The nearer an inscription comes in point of time to the facts which it records, the better is its authority. The names of unfortunate or unenterprising kings soon fade from the memory, and among a people so devoid of the true historic feeling as the Hindus, they easily fall into utter oblivion. Such will be found to be the fact as we proceed. The names of Pulakesi and other favourites are frequently cited, while others are as frequently passed over. Nor is this all; the order of the names is sometimes found inverted, and other discrepancies are met with which show that the Chälukyas were but poorly informed about the history of their line.

In addition to the inscriptions above noticed, several belonging to this dynasty have appeared in the pages of the *Journal of the Bombay Branch of the Royal Asiatic Society*. The earliest¹ of these is without date, but the character in which it is written closely resembles that of our plates, and cannot be very long posterior to them. The names also indicate the period to which it belongs. Râjâ Sri Nâga Vardhana makes the grant which the inscription records, and the genealogy is thus stated:

1 Kirtti Varmâ Râjâ.

2 Pulakesi.

3 Jaya Sinha.

4 Râjâ Sri Nâga Vardhana.

Even thus early we find discrepancies. According to Mr. Elliot's table, and the generally received genealogy, Pulakesi was the father, not the son, of Kirtti Varmâ, and it seems impossible to understand this error. The names of Jaya Sinha and of his son Nâga Vardhana also present great difficulties. Mr. Elliot's list gives us Vishnu Vardhana, the

¹ Vol. ii. p. 4.

founder of the Eastern line, who conquered Vengi in A.D. 605, and he was succeeded by a Jaya Sinha. Could it be supposed that Vishṇu Vardhana and Nāga Vardhana were mere variant names of the same monarch, it would be necessary to invert this order; but although the grant is in all probability inaccurate as to the relative position of the grantor's uncle and grandfather, the same error cannot be supposed to have been made respecting himself and his next relative—it is utterly incredible that the name of his son should have been given as that of his father. The evidence upon which Mr. Elliot has placed Jaya Sinha after Vishṇu Vardhana does not appear; it was no doubt cogent, and the result ought not to be lightly disturbed. The alternatives, then, are these—shall the names of Vishṇu Vardhana and Nāga Vardhana be assigned to the same person, and the name of Jaya Sinha be placed before him, instead of after, in the order of succession? or shall the names of Nāga Vardhana and Jaya Sinha be introduced as additions to Mr. Elliot's list? In favour of the former there is nothing but the partial and unsatisfactory resemblance of the names. Independent of what has been urged against the first alternative, there are reasons in favour of the opposite course and for the interpolation of the names. The date of the inscription now published is 338 A.D., and, as above stated, the character in which it is written and that of the grant under discussion are very similar. This should lead us to place the two as near together in point of time as possible. But if Nāga Vardhana and Vishṇu Vardhana were names of the same monarch, three centuries must have passed between the two inscriptions, for Vishṇu Vardhana was reigning in 605 A.D. This is a longer interval than the similarity of the writing would seem to warrant. Again, the date of Pulakeṣi is 489 A.D., and Satyāśraya, who stands third after him in the list, began to reign in 609 A.D., thus leaving a period of one hundred and twenty years occupied by only two names. There appears also to have been some interruption of the regular order or succession about this time. The evidence then is all in favour of the introduction of the

names of Jaya Sinha and Rājā Śrī Nāga Vardhana before the name of Satyāśraya.

Mr. Elliot has already noticed the great power of Pulakeṣi and the alleged extent of his conquests.¹ This grant of Nāga Vardhana's states that Pulakeṣi "reconquered his own dominions, and (afterwards) the three kingdoms of Chera, Chola and Pāndya;" he also "gained a new title by the defeat of Śrīharsha, lord of the northern countries."

The grant which seems to come next in order of time is without date.² It contains only three names—Rāṇa Vikrama, his son Kirtti Varmā, and his son Viṣṇu Vardhana. The inscription was translated by Bal G. Shastree, who conceives this Rāṇa Vikrama to be represented by Vikramāditya II., No. 13 of the list, who was succeeded by a Kirtti Varmā. If this were correct, the name of Viṣṇu Vardhana would have to be inserted in the above list, between the two Kirtti Varmās (Nos. 14 and 15). A different appropriation of the names, however, seems preferable. The Shastree indeed hesitated greatly in his identification, observing that the character in which the grant is written might "make it two or three centuries older;" to which observation a hearty assent may be given. The loose and varying nature of the genealogies in these grants has already been commented upon. It would seem, indeed, that the word "son" meant nothing more than "descendant" in many cases, and that the writers, either from ignorance, or from utter indifference to the truth, frequently confined themselves to the recital of some of the more prominent and best-remembered names. The writing of the document should carry it back as far as possible. It may therefore be assigned to Viṣṇu Vardhana, the founder of the Eastern line, who conquered Vengī in A.D. 605. His father was Kirtti Varmā, as stated in the inscription, but to find a name at all in consonance with that of Rāṇa Vikrama it is necessary to go back three steps to Rāṇa Rāga, No. 2 of Mr. Elliot's list, and to get at this name the renowned and often cited Pulakeṣi is passed over. There is a difficulty about this, but a solution may possibly be found in the fact that

¹ Journ. II. p. 8.

² Journ. Bomb. R. A. S. II p. 1.

Rana Rāga was known also under the names of Rāja Sinha and Vishṇu Vardhana. The latter being the name of the author of the grant may have induced him to single out and record the monarch who bore the same name as himself.

The next two grants¹ have no date, but their place in the series is obvious. They give the names of four kings to whom the kingdom descended regularly from father to son—Pulakeṣi, Kīrtti Varmā, Satyāśraya, and Vikramāditya. The wording of the genealogy is peculiar. After naming "Pulakeṣi Vallabha the ornament of the race," it goes on: "his great grandson, the great grandson of Kīrtti Varmā, the beloved son of Satyāśraya, the unconquerable Vikramāditya." The grants are made by the wife of Chandrāditya, elder brother of this Vikramāditya, but no mention is made of his ever having sat upon the throne. We have next a grant by Vijayāditya,² who declares himself to be the son of Vinayāditya, son of Vikramāditya, and so on upwards to Pulakeṣi, in exact accordance with its predecessor—in fact, the wording of the two grants is to a great extent identical. This grant is dated Śaka 627 (A.D. 705) and agrees with Mr. Elliot's table which makes this king to have reigned from 695 to 733 A.D.

Two points in these records are worthy of observation. They all declare Satyāśraya to have gained the title of *Parameśvara* by his "defeat of Śrī Harsha Vardhana, lord of the northern countries;" a victory which a previous inscription ascribed to Pulakeṣi, who also bore the appellation of Satyāśraya or Satya Śrī, and who has the best title to the honour of the conquest. This is another instance of the very vague and imperfect knowledge which the Chālukya monarchs possessed of the history of their dynasty. The last-named grant (dated 705 A.D.) states that Vinayāditya "made the rulers of Kumara, Pārasika, and Sinhaha pay him tribute, and gradually acquired the full symbol of supremacy by the overthrow of the kings of the northern countries." *Kumara* is evidently intended for Kumārī or Kumārikā, that is, the most southern of the *śatpās* or divisions of Jambudwīpa, from which we derive our Cape Comorin. *Pārasika* is Persia, and *Sinhaha* is a

¹ Journ. Bomb. R.A.S., iii. 205, 211.

² Ibid. p. 206.

blunder for *Sinhala*, Ceylon. The vaunt of the inscription must doubtless be taken with a very considerable deduction, but it may be fairly assumed that the king's knowledge and ambition extended thus far; perhaps even that he had some intercourse with these countries, and flattered his vanity by stretching some complimentary visit or present into a proof of homage and submission.

The next reference to the Chálukyas is made in a grant of the Râshṭra Kûṭa dynasty,¹ dated 1008 A.D., which says that Teilapa of the Chálukya race, having defeated a Râshṭra Kûṭa king, came to the throne, and that "his son Satyâśraya became after him the master of the earth." This confirms Mr. Elliot's statement that the Rattas gained the ascendancy for a time, till they were finally reduced to subjection by Teilapa."² The date also agrees, as Satyâśraya reigned from 997 to 1008 A.D. This grant being dated in 1008 may justify us in extending his reign a little longer.

There are two other grants³ of a later period, when the power of the Chálukyas had passed away, but when the name of the dynasty was still maintained by a family reigning or pretending to reign in a corner of the old kingdom. These inscriptions come from the Konkan; one is dated 1182 Śaka, or 1260 A.D., the other bears no date. They profess to belong to the Chálukya family, but they bear none of the characteristic marks of the Chálukya inscriptions. The family is said to be descended from Karṇa, not from Hârîti like the old Chálukyas. The dated inscription gives only one name, that of Kâṇwa-deva, by whose minister Keśava, surnamed Mahâjani, the grant was made. The other gives the names of some "kings of this dynasty who flourished at Sangameśwar (or Someswar) in the Konkan." They are Karṇa, his son Vegutideva, his son Somadeva, who "repaired to heaven, but finding a vacancy on the earth returned to it." Lastly, his son Someśwara, who made the grant.

This closes the record of the remains of the Chálukyas. If the facts and speculations above set forth are correct, the

¹ Journ. Bomb. R. A. S., i., 210, 220.

² Journ. iv., 11.

³ Journ. Bomb. R. A. S. ii. 270, iv. 105.

following additions and alterations must be made in the first part of Mr. Elliot's list so often referred to. The lists of the Western and Eastern Lines remain unchanged.

1. Jaya Sinha, Vijayāditya.
2. Buddha Varmā.
3. Vijaya Rājā Sarvva, 338 A.D.
4. Rājā Sinha, Raṇa Rāga, Viahṇu Vardhana.
5. Vijayāditya II.
6. Pulakeṣi, A.D. 489.
7. Kirtti Varmā.
8. *Mangaliya*.
9. Jaya Sinha.
10. Rājā Śrī Nāga Vardhana.

Additional names are still required to fill up the interval between No. 3 and No. 6.

At the end of the lists the following names may be added of kings bearing the appellation of Chālukya and reigning in the Konkan. It is unknown whether Kāṇwa Deva, whose date is given, was prior or subsequent to the others. Possibly he may be the same as Karṇa.

Kāṇwa Deva, 1260 A.D.

Karṇa.

Vetugideva.

Somaḍeva.

Someṣwara.

2. THE GURJJARA PLATES.

These two plates may, for all practical purposes at the present day, be considered duplicates. The earlier is dated 15 Kārtik Samvat 380, the later, Kārtik full moon Samvat 385, and as before observed the last differs from the first only in the dates, and in a few particulars respecting the grantees. In the later grant the grantees are reduced in number, and they are not classified, as in the first grant, under the Vedas which they respectively taught and studied; but the differences are so trifling as to render it quite unnecessary to give separate transcripts and translations of both documents. Where they differ the corresponding passages are placed in parallel columns, by which means the variations will be

readily distinguished. There are many minor differences of orthography, and each document has a series of stops or divisions in certain passages which are not found in the other. These stops have all been introduced into the transcript, which may be considered a fair copy of the original document as drawn from two independent versions. Whatever is obscure or doubtful in one has been supplied from the other; but no alterations or emendations have been made beyond the introduction of the π , which is always absent in the originals.

The transcript now published differs occasionally from that which appeared in the Journal of the Asiatic Society of Bengal,¹ which would seem to have been rather hastily prepared. The differences, however, are but of slight importance, and the only one deserving notice is that in the title of the grantor, which is Praśānta not Praśānga-rāga. His name Śrīdatta Kuṣālī is used in the body of the deed, but his assumed title Praśānta Rāga is employed in the attestation at the end. In the Bengal transcript the title has been substituted for the name in the body of the deed, for which the original gives no warrant. There the name is clearly and unequivocally Śrīdatta Kuṣālī.

"The original of this grant," says the article before referred to, "is in the character of the fourth line of the alphabet plates of this volume, corresponding with that ascertained from inscriptions and coins to have been in use in Gujarat at the period of the date of these grants. Their antiquity is thus assured, but part of the singularity of this particular one consists in the style of the eulogium of the rājā and his ancestors who made the grant, every word of which has a double meaning. The grant is in Sanskrit prose upon the model of the *Kadambarī*, by Bana Bhaṭṭa, and has been explained and commented upon at length by the Pandit Kamalākānta, who regards it as a wonderful composition. It is impossible to give this explanation in these pages, for the eulogistic part of the grant, being in this double-meaning style, cannot be translated, the English language not ad-

¹ Vol. vii. p. 908.

mitting of the same amphibologies. The play upon words commences from the first sentence, which plainly translated implies, 'There was a person named Sāmanta Datta, born with fortunate auspices in the royal race of Gajjara ;' but these words admit also of translation, 'There was a boundless ocean named Gajjara,' and this original double meaning has led to the use of epithets and qualities for the rājā which hold equally with different meanings, as applicable to the Gajjara ocean. After wearing out the ocean amphibology, serpents, elephants, and women are pressed into the service by the ingenious conveyancer who drew this deed ; and it is a pity that such a happy device for multiplying mystifying words cannot be more fully explained for the benefit of the practitioners in Chancery-lane, who might find their advantage in imitating it."

The account thus given of the composition of this grant is correct in the main, though somewhat too broadly stated. The opening of the grant is certainly written in the style described, and similar passages subsequently occur ; but there is much which seems to bear only one signification. This "amphibological" style is not uncommon in similar grants of land, but the writer of the present document was certainly an adept in the art, and far transcends his cotemporary the Chālukya conveyancer, whose style is simplicity itself compared with this. The nature of this "amphibology" has been pretty accurately exemplified by the specimen given relating to the Gurjjara ocean. The royal family is compared to the ocean, and such qualities as *sthairyya*, stability ; *gāmbhīryya*, profundity ; and *lāvanya*, saltiness or beauty, are attributed to it. And so whenever a natural object is employed as a similitude, epithets are used which are applicable to both type and antitype. No attempt has been made to reproduce this equivocal in the translation, for it would be impossible to follow it up completely, nor would it be appreciated if successfully rendered. Our object is if possible to pick out a few grains of history, and so the whole of the eulogy has

¹ This is a curious blunder persistently repeated. The original is clearly Gurjjara, and so it is rendered in the Bengal transliteration.

been translated with direct reference to the royal personages and their family.

These grants furnish all that is known of the Gurjjara dynasty. The genealogy of the grantor is thus stated—SĀMANTA-DATTA was succeeded by his son VĪTA-RĀGA, otherwise called JĀYA-BHĀṬA, and his son ŚRĪ-DATTA KUSĀLI was the author of the grant. In the attestation at the end of the document, the grantor calls himself "PRASĀNTA-RĀGA," a title similar in signification to VĪTA-RĀGA, the name borne by his father.

This attestation or note at the end of the document is worthy of especial notice. The words are: "This is the own hand of PRASĀNTA-RĀGA, son of VĪTA-RĀGA, devoted to the worship of the Sun." The natural interpretation of the *swa-hasto*, "own hand," is *own hand-writing*, "autograph;" and if this is the real meaning, the words must be looked upon as an attestation added by the grantor himself, or some one specially authorized to sign for him. In the earlier grant this attestation is remarkably clear, in the later one many of the letters are defaced; but there is no doubt about the two being identically the same. When the writing of this attestation is compared with that of the body of the grant, a very considerable difference is apparent. The general style of the whole, and the forms of many individual letters, present a much more modern appearance. Judging from the character of the writing alone, by Prinsep's Alphabets, it would seem to belong to a period at least three centuries later than the character and the date of the grant itself. One or two of the letters, indeed, bear a still more modern appearance. And it is by the later forms that the age of an inscription must be judged, if judged at all by mere fashions of writing. New forms have to battle long against old habits of writing—and hence old forms should have less weight in favour of antiquity than later ones on the side of a more recent date.

In Prinsep's well-known table of alphabets dates are affixed to the several lines, and the inscriptions from which they were derived are stated. Conclusive evidence is thus afforded of the use of a particular form of writing at the period in

question; but the evidence proceeds no farther, it does not prove that archaic forms had fallen entirely into desuetude, or that new ones had not already sprung into existence and obtained a more or less extensive currency. That the fashion of writing and forms of letters afford some evidence, some strong indications of the date of their execution, is undeniable; but the date ought not to be assigned with that precision which the tabulated and dated forms of Mr. Prinsep's alphabets have been considered to authorize.

Returning to the document which has elicited these observations, does it furnish any evidence as to the time when the "attestation" was written. Apart from the style of the character, there is nothing in the appearance of it to suggest its having been written subsequently; and if the grantor really wrote it, or if any new hand added it for him, some difference of style might be expected, though not perhaps of the kind observable. On the other side, it is difficult to believe that the royal grantor would thus take the trouble of engraving the letters with his "own hand;" or that he or any other than a regular engraver should have executed the work so well—for the writing is fully equal, perhaps superior, to that of the deed. There is one fact, however, which seems decisive. The name given to the grantor by the attestation is Praṣānta-rāga. This, as before observed, is a title similar in signification to that of his father Vīta-rāga, whose real name was Jaya Bhāṭa. The grantor's true name was Śrīdatta Kuṣālī, and that name alone appears in the body of the grant. So that, if what we have called the attestation was added after any considerable lapse of time, the name employed in the document itself would doubtless have been extracted and used. This fact, and that of the attestation appearing on both grants, leave little or no room for doubting it to be what it purports, an attestation written by the hand or by the direct authority of the grantor himself. Satisfactory proof is thus afforded that two sorts of writing were used contemporaneously, which, judging from mere appearances, would seem to belong to periods two or three centuries apart.

A somewhat similar attestation by the writer is found at

the end of the Châlukya Grant (No. 1). There, however, the name is clearly that of the engraver, and has no connection with the name of the grantor. The letters in this attestation are larger than those in the body of the document, but the form and style of them are the same.

Another interesting fact in this inscription is that the grantor and his ancestors were declared worshippers of the sun. The prevalence of this worship in this part of India about the time of these grants has already excited attention, and one of the kings recorded in the Vallabhi Grants was a "great adorer of the sun."¹ This worship, however, must not be understood as a worship, pure and simple, of the great luminary, but as a preference given to him over the other deities of the Hindu Pantheon. This fact of "Sun-worship" entirely escaped notice in the account of the grants which was published in the Journal of the Asiatic Society of Bengal, but stress has since been laid upon the circumstance of the Vedas being unmentioned in the grants, and of their not "containing one word of Brahmanical gods or Brahmans."² A perusal of the translation will show this statement to be unfounded. There is, perhaps, less reference to Hindu gods than is usual in these documents; but the grant is distinctly made, for encouraging the study of the Vedas, to Brahmans whose names and gotras are specified; and in the first or cancelled grant the grantees are arranged in distinct classes as teachers and students of the four Vedas. The objects for which the grant was made, the perpetuation of the *Agnihotra*, etc., the "five great sacrifices," are also clearly indicative of the Brahmanical bias of the grantor. The whole document, indeed, is pervaded with Hinduism, and the worship of the sun, which the grantor and his family professed, must therefore be considered as a development of one of the wide-spreading ramifications of the Hindu faith.

Lastly, it may be stated that each grant consists of two plates, which were held together by a ring of copper fastened

¹ Thomas's *Inscrip.*, vol. i. p. 265

² *Table of Inscriptions in Index to the Journ. of the As. Soc. of Bengal.* This statement was based on the few passages which had been translated in vol. vii.

by a lump of lead, upon which is impressed in relief the name of "Sāmanta Datta." The grantor thus continued to use his grandfather's seal.

NO. 1. THE CHĀLUKYA GRANT.

- A 1 श्रीं स्वस्ति । विषयस्तन्वावारे¹ । विषयपुरदासका¹ । शरदुपगमप्रस-
 2 जगनतलविपक्षविपुलि विविधपुष्परत्नगुणनिकरावभासिते महा-
 महीपात्रयदुःखः । गंभीर्यवतिस्त्रितनुपालनपरे महादधाविवमान-
 3 लसगोचाणां हारीतिपुत्राणां स्वामिमहासेनपादानुध्याताणां चतुर्णा-
 4 नामन्धः । अपगतसखलजलधरपटलगनतलगतशिशिरकरकिरणकु-
 वलस्यतरयशसः श्रीजयसिंहराजः तस्मिन्तः प्रबलरिपुतिमिरपटल-
 5 भिदुरः सततमुदयस्रोत¹ . . . मखण्डितप्रतापी दीवाकर इव
 वल्लभ रणविकान्तश्रीगुहवर्म्मराजः तस्मिन् पुत्र प्रियव्यामप्रतिरथः चतु-
 6 र्दधिसलिलास्त्रादितयशो धनपवद्वेष्टान्ताकसमप्रभावः स्वबाहु-
 7 वलिपात्तो¹ . . राजश्रीः प्रातापातिशयोपगतसमयसमन्तमण्डलः
 परस्परपीडितधर्मार्थकाम¹ . . प्रणतिभावमुपरितोषगभीरान्नत-
 8 हृदयः सम्यक्प्रजापालनाधिगतः² । न्यक्षपणभेरणागतवत्सलः यथा-
 भिलषितफलप्रदो मातपितृपादानुध्यातः श्रीविजयराजसर्व्वस सर्व्व-
 9 जैव³ विषयपतिराष्ट्रयाममहत्तराधिकारिकादीन्समनुदर्शयत्विशु-
 वस्समिदितं चक्षामिर् यथा काशाकूलविषयान्तर्गतः 'सन्धियं-
 10 विणपरिययचसयामः सोद्वगः सोपरिस्करः सर्व्वदित्यविष्टिप्रातिभे-
 11 दिवापरिहीणः भूमिच्छिद्रन्वायेनाचाटभटप्रावेशः अंबूसरसामान्य-
 वाजसनेयकत्वाध्वर्म्मसम्रत्नचारिणां मातापितृराजन्यपुण्ययशोभि-
 12 वृद्धये वैशाखपूर्वमास्यामुदकातिसर्गणप्रतिपादितः भरद्वाजसगोचा-
 दिखरविः पत्तिये द्वे इन्द्रशूराय पत्तिका ताविशूराय द्वार्धपत्तिका
 13 ईश्वरस्वार्धपत्तिका दामाय पत्तिका द्रोणायार्धपत्तिका अतस्ता-

¹ The plate is much abraded in these places, and the characters either obliterated or very indistinct.

² Here there is a clearly written character which I cannot decipher.

³ Here the letter *v* has been supplied.

⁴ The text is very doubtful here. *Sandhiya* seems clear. The superscribed mark over the last letter may be *annodra*, although it is not written in the usual way. The following letter *ra*, which appears in the lithograph, is not fully warranted by the plate. The next two characters may be *prithvi*. Whatever may be the right reading, it is clear that the doubtful word consists of some name or descriptive title of the village granted.

- मिने अर्धपत्तिकामा इलायार्धपत्तिका षष्ठिदेवार्धपत्तिका सो-
- 14 मायार्धपत्तिका रामशर्मणो ऽर्धपत्तिका भाय्युयार्धपत्तिका द्रोणध-
रायार्धपत्तिका धूम्रायणसगोत्रावुकायदिवर्धपत्तिका शूरायार्धप-
- 15 त्तिका ॥ दौण्डकीयसगोत्रभट्टः पत्तिका समुद्राय दिवर्धपत्तिका
द्रोणाय पत्तिका त्रयं ताविशर्मणो पत्तिके द्वे भट्टिने ऽर्धपत्तिका
- 16 वचायपत्तिका द्रोणशर्मणो ऽर्धपत्तिका द्वितियद्रोणशर्मणे ऽर्धप-
त्तिका ॥ काश्यपसगोत्रवप्स्वामिने तिस्रः पत्तिका दुर्गशर्मणे ऽर्धप-
- 17 त्तिका दत्तायार्धपत्तिका काश्यपसगोत्रवादायव. वर्धपत्तिका
सेलायपत्तिका द्रोणायपत्तिका ॥ सोमायार्धपत्तिका सेलायार्धपत्ति-
- 18 का वत्रशर्मणे ऽर्धपत्तिका भायिस्वामिने ऽर्धपत्तिका ॥ माथरसगोत्र-
विशाखायपत्तिका धरायपत्तिका नन्दिने पत्तिका कुमाराय पत्ति-
- 19 का रामाय पत्तिका पात्रस्थार्धपत्तिका गणायार्धपत्तिका कोट्टुवा-
यार्धपत्तिका भायिवट्टायार्धपत्तिका नर्मणे ऽर्धपत्तिका रामशर्मणे
- 20 ऽर्धपत्तिका ॥ हारितसगोत्रधर्मधरायदिवर्धपत्तिका ॥ वैष्णवसगोत्र
भट्टिने पत्तिका ॥ गोतमसगोत्र धरायार्धपत्तिका अम्मधरायार्धपत्ति-
- 21 का सेलायार्धपत्तिका ॥ शाण्डिलसगोत्रदाषायार्धपत्तिका ॥ लक्ष्मणस-
गोत्रकार्कुस्थपत्तिका ॥ वत्ससगोत्रगोपादित्याय पत्तिका विशाखाय-
- 22 ऽर्धपत्तिका शूरायार्धपत्तिका भायिस्वामिने ऽर्धपत्तिका यवशर्मार्ध-
पत्तिका ताविशूरायपत्तिका कर्कस्थार्धपत्तिका ताविशर्मणे ऽर्धपत्ति-
- 23 का शर्मणे ऽर्धपत्तिका कुमारायार्धपत्तिका मन्त्रीश्वरायार्धपत्तिका
वाटकायार्धपत्तिका च तेभ्यः सर्वेभ्यः नलिचरुवैश्वदेवाभिहोत्रादि-
- 24 क्रियोत्सर्पणार्थं आचन्द्रार्कावधितिस्थितिसमकालीनः पुत्रपौत्रा-
न्वयभोग्यः यत्सङ्क्षैरन्यैर्वागामिभोगपतिभिस्सामान्यभूप्रदानफले-
- 25 षुभिः नलवेणुकदलिसारं संसारमुदधिजलवीचीचपलाद्यभोगाः प्र-
वलपवनाहताश्चत्यपत्रचंचलां च श्रियं कुसुमितशिरीषकुसुमसदृश-
- 26 पायं च यौवनमाकलय्य अयमस्मदायो नुमन्तव्यः पालायितव्यश्च
27 यो वा ज्ञानतिमिरपटलावृतमतिराच्छिद्यः क्षिद्यमानं वानुमोदेत स
पञ्चभिर्महापातकैस्संयुक्तः स्यात् उक्तंच भगवता वेदव्यासेन व्यासेन ।
- 8 षट्षर्षसहस्राणि स्वर्गे वसति भूमिदः ।
अच्छेत्ताच्चानुमन्ताच्च तान्येव नरके वसेत् ॥
विन्ध्याटवीधृतोयासु शुष्ककोट्यवासिनः ।

- 9 उच्छाहरो हि वाक्को मुखिदं हरन्ति ते ।
 यत्र निर्वृत्ता मुक्ता राशयिः स्वरादिभिः ।
 10 यत्र यत्र तदा भूमिः तत्र तत्र तदा फलं ।
 वृन्दतां दिवातिथौ यदा रश्मिर्बुधिरिह ।
 मही महिमतां त्रेह दावाक्षौ यो मुपासवं ।
 11 चावीह दत्तावि पुरावरेक्षीः दावानि धर्माव्ययस्वरारि ।
 विह्वलमाकाशप्रतिमानि को वाक् साधुः पुनराददीत ।
 12 संवत्सरव्रतध्वे चतुर्वर्षध्वे त्रैमास्यैर्ब्रह्माक्षौ ।
 13 तत्र विहितं महासन्निविहार्तिं च सुहस्तामिना । संवत्सर
 ३२४ वैशाखपुष्यानां च विचारात् तिलीयेति^१

TRANSLATION.

In that royal capital, the city of victory, . . .² extensive as the expanse of the sky when clear from clouds at the approach of summer, illustrious for the numerous gem-like virtues of its various men, a solace to the sorrows of kings who sought its refuge, and, like the great ocean, intent upon the maintenance of its depth and permanence, there was in the family of the Chālukyas, who were of the Mānavya stock, sons of Hārīti, and worshippers of the feet of Swāmi Mahā-sena, a king named Jaya Sinha, whose fame was purer than a lotus under the beams of the moon when it comes forth to the sky from behind a mass of rain clouds. His son was Śrī Buddha Varma Rājā, heroic in battle, dear as the sun, whose might . . . who was a continuous current of prosperity, and a thunderbolt piercing the dark clouds of his powerful foes. His son was Śrī Vijaya Rājā Sarvva, a hero unequalled in the earth, whose fame had tasted the waters of the four oceans, who was equal in dignity with Kuvera, Varuṇa, Indra, and Yama, a fortunate monarch who with his own arm (had

¹ The other grants have *nirbhukta*.

² Here there is an *apadāmdāya*.

³ These *anuvāras* are clear in the plate, though not reproduced in the lithograph.

⁴ These words run on in the plate, but are written in rather larger letters.

⁵ The letters in the first line are much defaced, and the reading is consequently doubtful. *Vijayapura*, "the city of victory," may be a proper name. A few doubtful words occur afterwards, but as they are in the eulogistic portion of the grant, they are of little or no importance.

scattered) the hosts (of his enemies), by whose great might the whole neighbouring region was subdued, in whom duty, wealth, and love¹ were not inimical to each other, whose heart was bowed with the exceeding great joy . . . who was always devoted to the cherishing of his people, who was compassionate to the poor, and . . . who granted rewards as they were desired, and respectfully revered the feet of his parents. He (Śrī Vijaya Rājā Sarva) announces to all governors of provinces, chief men of districts, heads of villages, and others (as follows): Be it known to you that we have granted, with the pouring out of water, in the full moon of Vaiśākha, for the increase of the merit and fame of ourself and our parents, to the general body of priests and students belonging to the Kanva school of the Vājasaneyā (division of the Yajur-veda) in the town of Jambusara,² for the performance of the Bali, Charu, Vaiṣwadeva, Agnihotra, and other rites, the village of Pariyachasa . . . belonging to the province of Kāśā-kula, with the water-courses and all things standing thereon,³ free from all rights to forced labour for cutting and hewing . . . and into which the entrance of cheats and outcasts is interdicted, to be enjoyed for all time, as long as the sun, moon, sea, and earth shall endure, by the sons, grandsons, and descendants (of the following Brahmins):—Of the stock of BHARADWĀJA: Āditya Ravi, two shares;⁴ Indraśūra, a share; Tāviśūra, No. 2, half a share; Īṣwara, half a share; Dāma, a share; Droṇa, half a share; Attaswāmi, half a share; Īla, half a share; Shashthideva, half a share; Soma, half a share; Rāma-śarmā, half a share; Bhāyyu, half a share; Droṇadhara, half a share. Of the stock of DHŪMRĀYANA: Abuka, No. 2,⁵ half a share; Śūra, half a share. Of the DAUNDAKIYA stock: Bhaṭṭi, a share; Samudrā, No. 2, half a share; Droṇa, three shares; Tāviśarmā, two shares; Bhaṭṭi,

¹ Dharmamārtha-kāma.

² The modern "Jumbhacer."

³ See Supplementary Note.

⁴ The word *pattikā*, which I have rendered "share," is not given in the dictionaries. Has it any connection with the *patti* of the joint-tenancy villages in the N.W. Provinces? Prof. Hall found the word *padam* used for share in another grant.—See Journ. Amer. Or. Soc. vol. vi. p. 546.

⁵ The word which is here and in other places written दिव is evidently दि, and is so written afterwards.

half a share; Vatra, a share; Droṇa-śarmā, half a share; the second Droṇa-śarmā, half a share. Of the KĀṢYAPA stock: Vappa-swāmi, the third, a share; Durga-śarmā, half a share; Dattāya, half a share. Of the KĀRṆYANA stock: Vādāya . . . half a share; Sela, a share; Droṇa, a share; Soma, half a share; Sela, half a share; Vatra-śarmā, half a share; Bhāyi-swāmi, half a share. Of the MĀTHARA stock: Viśākha, a share; Dhara, a share; Nandī, a share; Kumāra, a share; Rāma, a share; Pāsra, half a share; Gaṇa, half a share; Kottuva, half a share; Bhāyivatta, half a share; Narmma, half a share; Rāma-śarmā, half a share. Of the HĀRITA stock: Dharmmadhara the second, half a share. Of the VAISHNAVA stock: Bhaṭṭi, a share. Of the GOTAMA stock: Dhara, half a share; Amma-dhara, half a share; Sela, half a share. Of the stock of ŚĀNDILA: Dāsha, half a share. Of the stock of LAKSHMAṆA: Karku, a share. Of the stock of VATSA: Gopāditya, a share; Viśākha, half a share; Śāra, half a share; Bhāyiswāmi, half a share; Yasha-śarmā, half a share; Tāviśura, a share; Karkri, half a share; Tāvi-śarmā, half a share; Śarma, half a share; Kumāra, half a share; Mantriśwara, half a share; Bātala, half a share,—to all these (is the grant made). Wherefore, having reflected that the world is (as frail) as the pith of a reed, bamboo or plantain—that enjoyment is as transitory as a wave of the ocean, that fortune is as unsteady as the leaves of the holy-fig tree agitated by a strong wind, and youth like water on the flowers of the blooming mimosa—let future proprietors of our own or any other race who are desirous of reaping the rewards of gifts of land, which confer a general benefit, respect and maintain this our grant. That ignorant man, with a mind shrouded in thick masses of darkness, who shall seize it, or shall abet the seizure of it, shall be guilty of the five great sins. And it has been said by the holy Vyāsa, the compiler of the Vedas :—

1. Sixty thousand years the giver of land dwells in heaven, but he who resumes or approves the resumption shall dwell the same number of years in hell.

2. Those who seize a grant of land are verily born (again) as black serpents dwelling in dry hollow trees in the arid forests of the Vindhya.

3. By Sagara and many other kings the earth has been enjoyed, and whoever at any time has possessed the earth has enjoyed its produce.

4. Strenuously guard, O Yudhishtira ! land granted aforetime to the twice-born : for better than the gift (itself) is the conservation thereof, O best of rulers.

5. Gifts, productive of fame, have been granted in this world by former rulers for the sake of religion—these are like the unconsumed flowers of an offering—what honest man then would take them back again ?

Written on the full moon of Vaisākha, in the year three hundred and ninety-four, under the direction of Nanna Vāsāka, by Khuddaswāmī, the minister charged with the affairs of peace and war. Samvatsara 394, Vaisākha-suddha.

Engraved by Kshatriya Matr-sinha.

Nos. 2, 3. THE GURJJARA GRANTS.

[The numbers refer to the lines in Plate 2. Where the text is divided into two columns, the left column gives the version of Plate 2, the right column that of Plate 3.]

- 1 श्रीं स्वस्ति नान्दीपुरीतो । विविधविमलगुणरत्नसम्पादुद्भासिते स
- 2 कलदिङ्मुखे परिचाताशेषसपञ्चमहामहोभृति सततमवलङ्घितावधौ
- 3 स्त्रीर्धगाभीर्धलावण्यवतिमहासत्त्वयतिदुरवगाहे गुर्जरनृपतिवंश-
- 4 महोदधौ श्रीसहजकोट्यहदयाहितासदः कौस्तुभमणिरिव विम-
- 5 लयशोदीधितिनिकरविनिहतकलितिमिरनिचयः सत्पत्नो वैनतेय
- 6 र्वाकृष्टशत्रुनागकुलसन्ततिरुत्पन्नितलवदिनकरचरणकमलप्रणामा-
- 7 पनीताशेषदुरितनिवहः सामन्तदत्तः प्रतिदिनमपेतशङ्कं येन स्थित-
- 8 मचलगुणनिकरकेसरिविराजितवपुषा विनिहतारिगजकुम्भविगलि-
- 9 तमुक्ताफलाच्छलप्रकीर्णविमलयशोवितानेन रूपानुरूपं सत्वमुद्रहता
- 10 केसरिकिशोरकेणोपरिचितिभृतां यस्यातिमलिनकलियुगतिमिर-
- 11 चन्द्रमममनुदिवसमन्याम्यसर्जयेव ययुः कलासमूहादयो गुणाः वि-
- 12 क्रमानीतमदविनाशालसगतयो रतिगवघटाः प्रमदास यस्स चा-

¹ Both plates agree in writing this word *janmid*, with the final long.

² Here I have inserted . .

- 8 विरतदानप्रवाहप्रीणितात्यिमधुकरकुलस्य चचिरकीर्त्तिवशासहास-
 9 स्य सततमस्वलितपदं प्रसरतः सद्गंशाहितशोभागौरवस्य भद्रमतङ्ग-
 स्त्रैवकरघातविनिहतचितिभुदुन्नततनूहस्य रेवानिर्ज्वरसखिलप्रणा-
 10 तमधुरनिनादस्य भगोद्भवाः समुन्नतपयोधराहितश्रियो दयिता
 11 इव मुदे विन्ध्यनगोपत्यकाः यद्योपमीयते शशिनिनीसीम्यवैमल्यशोभा-
 कालाभिर्नक्तलङ्केन । श्रीनिकेतशोभासमुदयाधःकृतकुलकण्टकतया
 12 कमलाकरे न पङ्कजन्मतया । सलोत्साहविक्रमैर्मृगाधिराजे न कूरा-
 शयतया । लावण्यस्त्रैर्व्याधोर्व्यस्त्रित्यनुपालनतया महोदधौ न आ-
 13 लाभयतया । सत्कटकसमुन्नतविद्याधरावासतया हिमाचले न ख-
 षपरिवारतया । यस्य च सङ्गोः शेषोरगस्त्रैव विमलकिरणमणिश-
 14 ताविष्कृतगीरवः सकलजगत्साधारणो । यस्य प्रकाशते सत्कुलं श्री-
 लेन । प्रभूत्वमाप्तया । शस्त्रमारातिप्रणिपातेन । कोपो नियहेण । प्र-
 15 सादः प्रदानैर्धर्मो देवद्विजातिगुरुजनसपर्ययेति । तस्य मूनुः प्रतप्त-
 चिरकनकावदातः कल्पतरुवाविरतमभिश्चितफलप्रदः सततमृ-
 16 तुगणस्त्रैव वसन्तसमयो वसन्तसमयस्त्रैव प्रविकसितनिविडचूतत-
 17 वनाभोगः सरस इव कमलनिवहः कमलनिवहस्त्रैव प्रवोदो महावि-
 षधरस्त्रैव मणिर्मणेरिव स्वच्छतारभावो महोदधेरिवामृतकलशो
 18 मृतकलशस्त्रैवामरणदायित्वप्रभावः वरिण इवमदः प्रमदाञ्जनस्त्रैव
 विलासो विभवस्त्रैव सत्पावविनिधोगो धर्मस्त्रैव क्रतुः क्रतोरिव
 19 स्वदक्षिणकालः प्रेम्ण इव सङ्गावः शशिन इवामलकलासमूहो नि-
 20 यतमलङ्कारभूतः सकलनिशाङ्गराभिरूपवदनः शक्तो वदान्धः प्रबल-
 रिपुबलानीकसमरसमवाप्तविजयश्रीः श्रीवीतरागापरणामा श्रीज-
 21 यभटः कलिप्रतिपक्षभयाच्छरणार्थिन इव यमाश्रिताः सविनयानु-
 22 याः स्फुरितविमलकीर्त्तिसौदामणिना येन सकलजीवलोकानन्दका-
 रिणा कालवलाहकैर्नैवावन्ध्यफलं गर्जताप्रणयिनामपनीताक्षुष्णा-
 23 सन्तापदोषाः यच्च शूरोऽपि सततमयशोभीरुपगतनृणोऽपि नृ-
 णार्ज्जनाविच्छिन्नतर्पः सर्वप्रदानशीलोऽपि परयुवतिहृदयदानपरा-
 24 कुलः पटुरपिपरपरिवादानिधानकडधीः यस्य च न विरोधिरूप-
 शीलस्य जीवनसद्वृत्तस्य विभवः प्रदानस्य त्रिवर्गसेवापरस्तरापीहि-
 25 तस्य प्रभुत्वं ज्ञानोः कलिकालो गुणानामिति तस्य मूनुः सज्जलनप-
 26 टकनिर्गन्तरञ्जनिकरकरावबोधितकुमुदधवजयशः प्रतानास्त्रगितो-

- नभोमण्डलो नैकसमरसंकटप्रमुखगतनिहतशत्रुसामन्तकुलवधूप्र-
 27 भातसमयवदितच्छलोद्गीयमानविमलनिस्त्रिंशप्रतापो देवद्विजाति-
 28 गुरुचरणकमलप्रणामो . . . पृथ . मणिकोटिचिरदीधितिपिरा-
 जितमुकूटोद्भासितशीरा दीनानाघातुराभ्यागतार्थिजनान्निष्ठ . . .
 29 तविभवमनोरथोपचीयमानत्रिविष्टपैकसहायधर्मसन्धयः प्रणयपरि-
 30 कुपितमानिनीजनप्रणामपूर्वमधुरवचनोपपादितप्रसादप्रकाशीकृत-
 31 विदग्धनागरकस्वभावो विमलगुणकिरणपञ्जरचिन्नवज्रलकलिति-
 2 मिरनिचयसमधिगतपञ्चमहाशब्दः श्रीदत्तः¹ कुशली सर्वानेवराज-
 सामन्तभोगिकविषयपतिराप्रयाममहत्तराधिकारिकादीन्समनुबो-
 3 धयत्सु वो विदितमस्माभिरकुरेश्वरविषयान्तर्गत । शिरीषपट्टक ।
 4 लघग्रामः सोद्वङ्गः सोपरिकरः सर्वोदानसङ्घाह्य सर्वदित्यविष्टिप्रा-
 तिभेदिकापरिहीणो भूमिच्छिद्रन्यायेनाघाटभटप्रावेश आचन्द्रा-
 5 र्कार्यवर्चितस्थितिसमकालीनः पुचपीचान्वयभोग्यो
 6 कम्बूसरोविनिर्गताकुरेश्वरविष- कम्बूसरोवासव भारद्वाजसगोच-
 7 यान्तर्गतशिरीषपट्टकवासिब . कक्षसन्नद्धचारित्राह्वणादित्यरवि
 च वत्ससगोचराश्वलायनसन्नद्धचा- । तथा तापिशुर । इन्द्रशूर । ईश-
 रित्राह्वणभट्टाध्यापक । तथा गो- र । तथावत्ससगोचभट्टाध्यापक ।
 पादित्य । तथा भट्टिगण । विशाख गोपादित्य । वाह । विशाख । अ-
 7 । अपिशर्म । द्रोण । काक्षपसगो- पिशर्म । भट्टिगण । द्रोण । माध-
 चभट्टिदाम । तथा वच । अश्वत्थ- रसगोचविशाख । धर । नन्दि ।
 वाजसनेयदीण्डकीयसगोच क- राम । दीण्डगीसगोचतापिशर्म ।
 ण्वसन्नद्धचारित्राह्वणतापिशर्म । द्वितापिशर्म । द्रोण । भट्टि । पि-
 8 द्वितापिशर्म । दत्तस्वामि । भा- तृशर्म । भागिस्वामि । दत्तस्वामि ।
 गिस्वामि । पितृशर्म । भट्टि । काक्षसगोचधर । दामधर । ई-
 द्रोण । धूम्रायणसगोच कर्क- श्वर । कौण्डिन्यसगोचवाव । घोष
 ध्यापक । आनुक । कौण्डिन्यस- । शैल । काक्षपसगोचभट्टिदामि ।
 9 गोचवाटशर्म । शैल । घोष । म- वाच । हारीतसगोचधर्मधर । धौ-
 हादेव । वाव । माधरसगोचधर । मयनसगोचकर्कशाध्यापक । आनुक
 विशाख । नन्दि । रामिच । हा- । इन्द्रशूरादिप्राह्वणेभ्यस्तुस्त्रिंश-
 रितसगोचधर्मधर । हान्दोम्भ- ज्यो

¹ No. 3 reads श्रीदत्तमकुशली.

- 10 भरद्वाजसमीपकौशुमसन्नक्षपा-
रित्राक्षय इन्द्रशर्म । आदित्य-
वि । तापिशूर । इन्द्रशूर । ईश्वर ।
धर । दामधर । द्वि ईश्वर । भव-
11 कच्छविनिर्गतभेरज्जिकानिवा-
सि सुधर्मणचौलिसगोत्रपिप्प-
लादसन्नक्षचारित्राक्षयभद्र । वा-
सुशर्म । द्रोणस्वामि । रुद्रादित्य ।
12 पूर्वस्वामि । एभ्यश्चतुशरणब्राह्म-
णेभ्यश्चातुर्विद्यपरिकल्पनापूर्व
वलिचरुवैश्वदेवाभिहोत्रपञ्चमहायज्ञादिक्रियोत्सर्पणार्थं आतापि-
13 चोरात्मनश्चपुण्ययशोभिवृद्धये कार्तिक्यामुदकातिसर्गशातिसृष्टो य-
14 तो ऋद्धवंशैरन्वैर्द्यागामिभोगपतिभिः प्रवक्ष्यपवनप्रेरितोदधिजलत-
रङ्गचञ्चलं धीवलोकमभावागुगतानसारान्विभवान्दीर्घकालखेयसख
15 गुणानाकलख सामान्यभोगभूप्रदानफलेप्सुभिः शशिकरश्चिरं यश-
स्विराय चिचीसुभिरयमसाहायो गुमन्तव्यः पालयितव्यश्च । यो वा-
16 ज्ञानतिमिरपटलावृतमतिराच्छिन्नादाच्छिन्नमानकं वागुमोदेत स
17 पञ्चभिर्महापातकैः [सोपपातकैः]¹ संयुक्तः स्यादुत्तमभमवता वेदव्या-
सेनव्यासेन

² षष्टिवर्षसहस्राणि स्वर्गे तिष्ठति भूमिदः ।

आच्छेत्ता वागुमन्ता च तान्येव नरकं वसेत् ॥

- 18 विन्ध्याटवीष्वतोयासु शुष्ककोटरवासिनः ।
कृष्णाहयो हि वायव्ये भूमिदायं हरन्ति ये ॥
वज्रभिर्वसुधा भुक्ता राजभिः सगरादिभिः ।
19 यस्त यस्त यदा भूमिस्तस्त तस्त तदा फलं ॥
यानीह दत्तानि पुरानरेन्द्रीर्नानि धर्मार्थं यशस्कराणि ।
20 निर्भुक्तमात्रप्रतिमानि तानि को नाम साधुः पुनरादहीत ॥
इति संवत्सरशतत्रये शीतलधिके इति संवत्सरशतत्रये पञ्चाशीत्य-
कार्त्तिकशुक्लपक्षदश्यां सिद्धितं स- धिके कार्तिकपौर्णमास्यां सिद्धितं
21 त्रिविद्यहाधिकरणाधिकतरवेण सन्धिविद्यहाधिकरणाधिकतरवे-

¹ The words in brackets are omitted from No. 3.

² Number 3 reads *ashashim*.

स्वमुखाद्यायेति । सं ३८० का- ण स्वमुखाद्यायेति सं ३८५ का-
र्त्तिकगुहना र्त्तिकसु . .

२२ दिनकरचरणार्द्धनरतस्य श्रीवीतरागसूतोः स्वहसोऽयं प्रशान्तरा-
गस्य

TRANSLATION.

Om! Salutation! Filled with prosperity! In that great ocean the royal race of Gurjjara, a vast bathing-place¹ of great virtue for its stability, depth, and saltness,² whose bounds can never be passed, which cherishes the great earth and all its protected adherents, which faces every quarter of the world, and is adorned with the rich jewels of manifold brilliant virtues, (in that family there was a king named) Sāmanta-datta—by the multitudinous rays of whose brilliant fame, resembling the Kaustubha jewel placed along with Fortune on the heart of Kṛṣṇa at his birth, the accumulated darkness of the Kali age was dispelled—by whom, like the good bird Vainateya,³ the progeny of the cruel families of his enemies was uprooted, and whose whole collective sin had been removed by adoration of the lotus feet of the (sin-)destroying Sun—who having a body adorned, like a lion's, with (a mane of) manifold stable virtues daily dispelled the doubt which sprung up—the bright canopy of whose fame was spread as it were with pearls fallen from the temples of his slaughtered elephantine foes⁴—and who, like a young lion, constantly upheld truth in its real nature over the kings of the earth. ⁵Like as the digits of the moon maintain a daily contest with the darkness of the tenebrous Kali age, so his assemblage of digit-like virtues, having subdued pride, desire, and indolence, kept up a continuous struggle with the elephantine troops of his pleasures. To him came swarms of loving friends, like bees, attracted by the delightful flow of his unceasing liberality. His bright renown secured the submission of men who were not his

¹ *Vagāha*, a bath. The context would seem to imply some other meaning, about which the lexicons are silent.

² *Lar mya*. This word as so signifies "beauty."

³ Garuda.

⁴ Alluding to the juice which exudes from the elephant's temples when in rut.

⁵ This and the passages which follow are obscure, and are difficult to translate intelligibly.

adherents, and his feet were always stretched forth firmly (i.e. he was resolute in his undertakings). He was of good family, kind, beautiful, and honourable. The hair of his body stood erect with pleasure over the kings slain by his hand, destructive as the trunk of a mighty elephant. His voice was as sweet as the sound of the water falling down the cataracts of the Narmadâ; and his wives had beautiful high swelling breasts for his pleasure, like as the valleys of the Vindhya mountains have lofty clouds to make them agreeable.¹ He was comparable with the moon in respect of its soft, pure, bright digits, but not for its spots: with the lotus from the thorniness of its tribe being blunted² by the overflowing beauty of the abode of Fortune,³ but not for its growing in mud: with the lion for excellence, energy, and prowess, not for being the abode of cruelty:—with the ocean for its maintenance of its saltness, stability, depth, and fixity, not for being the dwelling-place of ferocious animals: with the Himalayas for their having the dwellings of the proud Vidyâdharas on their fine declivities, but not for being surrounded by hilly countries.⁴ His excellent wealth, like that of the serpent Śeṣha, having its vastness displayed by hundreds of bright-rayed jewels, was common to all the world. The excellence of his family was shown by his virtuous character—his supremacy by his habit of command—his military skill by defeat of his enemies—his wrath by aversion—his generosity by gifts—and his religion by reverence of the gods, brahmans, and spiritual teachers.

His son was Śrī Vita Râga, otherwise named Śrī Jaya Bhaṭa, who was beautiful as hot burnished gold. Like the kalpa tree, he was the unceasing bestower of most desirable benefits. In the cycle of the seasons, he was always like the spring season; and as in the spring season is a grove of

¹ In this passage the word *payodhara* seems to be used in the double sense of "a woman's breast" and "a cloud."

² *Adhah-kṛta*, "turned down."

³ Śrī Lakṣmī, or Fortune, is fabled to dwell in the lotus flower, especially in the red lotus which has thorns.

⁴ This last clause is doubtful. The word in the original is *khaśha*, which is not to be found in the dictionaries. I have read it as *khaṣa*, "a mountainous country to the north of India."

bushy mango trees in full bloom, such was he. He was like a bed of lotus flowers in a lake, and as a bed of lotus flowers was his vigilance. He was a gem as of the great serpent (Sesha), and as of a gem was his bright pure nature. He was a pot of nectar from the great ocean, and as of a pot of nectar was the undying sweetness of his disposition. His concupiscence was like that of an elephant, and his amours like those of a voluptuary. His favour to the meritorious was that of magnanimity. He was as a sacrifice to his duty, and as of a sacrifice were his settled times for bestowing gifts upon Brahmans. His good nature was like that of affection. In him was an assemblage of qualities brilliant as the digits of the moon. In the use of ornaments he was moderate. His face was like unto the full moon. He was courteous and generous, and fortunate in victories obtained in battle over the hosts of his powerful enemies. The virtues seeking refuge in dread of their enemy, the Kali age, humbly resorted to him as to Yama (the god of justice). As a black rain cloud with its thunderings brings fertility and plenty, so he, by the lightning of his bright glittering fame, drove away the evils of heat and thirst from his friends. Although he was a hero, he was fearful for his surpassing fame; though his desires were extinguished, he was desirous of sharing in the acquisition of merit; though thoroughly generous in character, he was averse to bestowing the hearts of damsels upon strangers; and though eloquent, he was dull-witted in calling names and casting abuse upon opponents. In him beauty was no obstacle to good nature, nor youth to good conduct, nor wealth to liberality, nor pursuit of the *tri-varga* (love, duty, and wealth) to abstinence from harm of his fellows, nor power to forbearance, nor the Kali age to all virtues.

His son was Śrī Datta Kuṣālī, whose fame is as pure as a water-lily expanding under the rays of the moon as it emerges from a mass of rain clouds, and who is like the firmament when unconcealed by spreading clouds; whose brilliant merciless valour is unintentionally extolled by the weeping at early morn of the women of the neighbouring families of his slaughtered foes encountered in many battles; who rever-

antly bows to the lotus feet of the gods, Brahmanas, and spiritual teachers; whose head is adorned with a crown shining with millions of brilliant rays emitted by charming jewels; whose heart is grieved for the poor, the sick, and the needy, who resort to him in their necessities; and who is a store of virtue, that only friend which realizes for us our hopes in heaven. In his character the astuteness of the courtier is manifested by the gentleness which he displays in soft words and respectful courtesy to women who are angry about his love. The rays of whose brilliant virtues form as it were a cage into which the thick darkness of the Kali age is cast, and who has obtained the five great titles.¹ He (Śrī Datta Kuśali) announces to all Rājās, neighbouring proprietors, governors of provinces, the chief men of districts, heads of villages, and others (as follows):—Be it known to you that we have granted, with the pouring out of water in the month of Kārttika, for the increase of the merit and fame of ourself and our parents, and for the performance of the Bali, Charu, Vaiṣvadeva, Agnihotra, the Pancha-mahā-yajnas (five great sacrifices), and other rites, the village of Śīrisha-padraka, a *lāṣa-grāma*² included in the province of Ākrūreṣwara, with the water courses³ and all things standing thereon, including every variety of income, free of any rights to forced labour for cutting and hewing, and into which the entrance of cheats and outcasts is interdicted, to be enjoyed for all time as long as the sun, moon, sea, and earth shall endure by the sons, grandsons, and descendants of the

following Brahmanas who, following Brahmanas who are having left the town of Jam- to dwell in the town of Jam-

¹ *Pancha-mahāyajna*. Here I follow Prof. F. E. Hall, who has a learned note upon the phrase in the Journal of the American Oriental Society, vol. vi., p. 540. He was, however, confessedly doubtful and dissatisfied, and I cannot but share his doubts, though I have no better interpretation to propose. *Sabda*, "sound, word," can hardly signify "title." Mr. W. Elliot considers the phrase equivalent to the *Naubat* of the present day, that is, "a band of music." (See *supra*, page 256.) I am inclined to believe it must mean a series of mystical words or invocations, such as cited by Prof. Hall in the note referred to.

² This is clearly a descriptive term, not part of the name of the village; but its meaning is not discoverable.

³ See supplementary note at the end, upon the meanings of the technical terms employed to designate the rights conferred.

busara,¹ dwell in the village of Śirīsha-padraka included in the district of Akrūreṣwara, viz., to Bhaṭṭi the Adhyāpaka (teacher) and to Gopāditya, Bhaṭṭijana, Viśākha, Agniśarmma, and Droṇa, associate Brahmins and Brahmachāris of the Vatsa stock and Āśwalāyana school—and to Bhaṭṭidāma and Vatra of the Kāśyapa stock. To Tāpi-śarmma, Tāpi-śarmma the second, Datta-swāmi, Bhāgi-swāmi, Pitṛ-śarmma, Bhaṭṭi, and Droṇa, associate Brahmins and Brahmachāris of the Kaṇwa school (of the Yajur), and of the stock of Duṇḍaki, adhvaryyu of the Vājasaneyana (portion of the Yajur). To Karkka the Adhyāpaka, and to Abuka, both of the Dhūmrāyana stock—to Vāta-śarmma, Śaila, Ghosha, Mahādeva, and Bāva, of the Kaundinya stock—to Dhara, Viśākha, Nandi, and Rāmila, of the Mathara stock, and to Dharmmadhara, of the Hārīta stock. To Indrasarmma, Ādityaravi, Tāpiśura, Indrasura, Īṣwara, Dhara, Dāmadhara, and Īṣwara the second, associate Brahmins and Brahma-

busara—to Ādityaravi and to Tāpiśura, Indrasura Īṣwara, associate Brahmins and Brahmachāris of the Bhāradwāja stock and Kaṇwa sect—to Bhaṭṭi the Adhyāpaka, and to Vāha, Viśākha, Agniśarmma, Bhaṭṭijana and Droṇa of the Vatsa stock—to Viśākha Dhara, Nandi, and Rāma, of the Māthara stock—to Tāpiśarmma, Tāpiśarmma the Second, Droṇa, Bhaṭṭi, Pitṛ-śarmma, Bhāgi-swāmi, and Drattaswāmi, of the Daṇḍaki stock—to Dhara, Dāmadhara, and Īṣwara, of the Lakshmanya stock—to Bāva, Ghosha, and Śaila, of the Kaundinya stock—to Bhaṭṭidāmi and Vatra, of the Kāśyapa stock—to Dharmmadhara, of the Hārīta stock—and to the Adhyāpaka Karkka and to Ābuka and Indrasura, of the Dhaumrayana stock. To these thirty-four Brahmins (is the village granted).

¹ The modern Jambosir or Jumboeser.

châris of the Chhândogya Bhâradwâja stock and of the Kauthuma school (of the Sâma-veda). Also to the following residents of Bherajjikâ who have retired from Bharukachchha,¹ viz., to Bhâdra, Vâsusarmma, Droṇaswâmi, Rudrâditya, and Pârṇaswâmi, associate Brahmans and Brahmachâris of the Sudharmmana-chaulisa stock, and of the Pippalâda school (of the Atharva-veda.) To Brahmans of these four schools is the village granted with the especial object of promoting the study of the four Vedas.²

Wherefore having reflected that this world is as unstable as a wave of the ocean driven by a powerful wind, that riches have no lasting existence, but pass away and are worthless, whilst virtues endure for a long time, let future proprietors³ of our own or any other race, who are desirous of reaping the rewards of gifts of land which confer a general benefit, and who wish to gather for themselves a long-enduring fame, bright as the rays of the moon, respect and preserve this our grant. That ignorant man, with a mind shrouded in thick masses of darkness, who shall seize it, or shall abet the seizure of it, shall be guilty of the five great crimes (and the minor sins).⁴ And it has been said by the holy Vyâsa, the compiler of the Vedas.

¹ Broach?

² So I understand the passage "*Ēbhyaḥ chatuḥ-charaṇa-brâhmanebhyaḥ châtur-vidyâ-parikalpanâ pâravam.*" The word *charaṇa* evidently signifies in this place a school or sect of Vedic learning. The four schools specified are those of Āśvalâyaṇa for the Rig, Kaṇwa for the Vâjasaneyi or White Yajush, Kuthumi for the Sâman, and Pippalâda for the Atharvan. The Sâman is further marked by the Brahmans being of the Chhândogya Bhâradwâja stock, i.e. of the stock of the Chhândogya or Sâma-veda Bhâradwâja, as distinguished from the more celebrated Bhâradwâja of the Rig-veda.

³ Bhoga-pati.

⁴ Upa-pâtaka. This is found only in No. 2.

(Admonitory verses : same as 1, 2, 3, and 5 in Grant No. 1.)

| | |
|---|---|
| <p>Written on the fifteenth of Kārttika-suddha, in the Samvatsara three hundred and eighty, by Reva, the minister charged with the affairs of peace and war, under the (King's) own order. Sam. 380, Kārttika suddha.</p> | <p>Written on the full moon of Kārttika in the Samvatsara three hundred and eighty- five, by Reva, the minister charged with the affairs of peace and war under the (King's) own order. Sam. 385, Kārttika-su . . .</p> |
|---|---|

This is the autograph of Praśanta-rāga, son of Vīta-rāga, devoted to the worship of the Sun.

SUPPLEMENTARY NOTE.

The legal terms employed in grants of land by conveyancers to express the privileges bestowed, and, perhaps, also, the limitations imposed on the grantees, have not received the attention they deserve. Prinsep long ago in some disparaging words remarked upon their obscurity.¹ For many of them the dictionaries afford no assistance. Prof. F. E. Hall, in his notes upon the grants of King Hastin,² has lately called attention to some of these terms, and has laudably endeavoured to throw some light upon their meaning; but he says, "there is something of experiment in the meanings attached." The terms used in the three grants before us are with one exception identical. *Sodranga* : *Soparikara* : *Sarvāddanasangrāhya* : *Sarvādityavishṭiprātibhedikāparikṛtā* : *Bhūmichhidranyāyena* : *Achātabhāṣa-prāveṣya*.

The terms *Sodranga* and *Soparikara* are generally found together. I have never met with *Sodranga* alone, but *Soparikara* is occasionally found without its companion. Colebrooke rendered *Soparikara* as "superior taxes;"³ and Colonel G. Le Grand Jacob as "all the produce of the village granted."⁴ The two terms in conjunction have been very variously rendered. In Wuthen's Grant⁵ they are translated as "the hamlets and other things pertaining to the village." Ball G. Shastree⁶ translates them as "public buildings and appurtenances." In some other instances of their employment the translations are too vague and loose to admit of the original terms and the

¹ Journ. Beng. A. S. vol. v. p. 728.

² Ibid. 1861, p. 9.

³ Trans. A. S. vol. i. p. 466.

⁴ Journ. Bom. R. A. S. vol. iv. p. 106.

⁵ Journ. Beng. A. S. vol. iv. p. 477.

⁶ Journ. Bom. R. A. S. vol. ii. p. 5.

translations being identified. Prof. F. E. Hall says,¹ "I have ventured a guess as to the meaning of *Soparikara*, which I am unable to recall, in a paper not by me at this moment. The first (*Sodranga*) may define the village under alienation vertically to the mid-air." The guess as to the meaning of *Soparikara* has not met the eye of the writer of these notes—the meaning suggested for *Sodranga* is evidently founded on the signification commonly attached to the word *udranga*, "an imaginary city, one floating in mid-air." It is true that grants occasionally convey the land with all that is above it to *dkāya* or the sky, and below it to *pāṭḍa* the infernal regions; but this supposed reference to the mythic aerial city of king *Harischandra* is, as its proposer felt, very unsatisfactory. The interpretations which I am about to offer may be equally unconvincing, but they, at least, bring us down to things terrestrial. *Udranga*² I take to be a derivative from *udra*, "water," and *uparikara*, a formation from *upari*, "above, upon." As such they may be the ancient representatives of the technical terms *jalkar* and *bankar*, "rights over water and wood," which constantly appear in modern deeds of conveyance and agreements for the occupation of land. There is one apparent objection to this interpretation, which is, that the term *soparikara* is occasionally used even when the trees are distinctly conveyed by other words; thus, "*Savṛkṣhamāḍikula soparikara*."³ This, however, must not be looked upon as an insuperable objection to the proposed interpretation, for the grant following the one last referred to⁴ has the following "*ṭṛṇakḍāḥṭhodakopetaḥ savṛkṣhamāḍikulāḥ*," where the *kḍāḥṭha* (wood) is conveyed by one phrase and the *vṛkṣa* (trees) by the following one.

The meaning of the next term, *Sarvāddānasagrāhya*, is "inclusive of all receipts" or sources of revenue, and this presents no difficulty.

The phrase *Sarvādityavishṭipratibhedika parikṣa* is less common; indeed, I have not met with it elsewhere. *Vishṭi*, "forced labour, corvée," is common enough. The words *ditya* and *pratibhedika* are not given in the dictionaries, but their derivation is manifest, and points to some connection with "cutting and hewing." *Diti*, from the root *ḍi*, signifies "cutting, splitting;" and *pratibhedika* is a derivative of the common root *bhid*, to "break, tear." The exact signification of the phrase is not apparent, but there can be no doubt

¹ Journ. Beng. R. A. S. 1861, p. 9.

² In Grant No. 1 the word is written *sodranga*, but the nasal is too regularly inserted in other places to allow of this being deemed other than an error.

³ Trans. R. A. S. vol. i. p. 465. Journ. vol. v. p. 176. Grant No. 3.

⁴ Ibid. Grant No. 9. See also Journ. Amer. Or. Soc. vol. vi. p. 543.

of its general import. The last word I read *parihīṭa* "exclusive," for it can hardly be *aparihīṭa*, "not exclusive." Taking the phrase in the general sense proposed, it is still susceptible of two different applications. It may declare the exemption of the tenure from all liability to forced labour for cutting or hewing; or, on the other hand, it may be a limitation or bar upon the grantees against exacting such labour from the inhabitants.

The next term, *Bhūmichchidranyāyana*, is the most puzzling of all. The meaning of the words forming the compound is obvious enough; but what the whole signifies, or how it is to be taken as an instrumental case, is by no means clear. The phrase is found in other places and in different combinations. In Wathen's Grant we have *samastardjakhyānām ahastaprekshantiyam bhūmichchidranyāyana ishama cha*;¹ and in the Samangarh plate we find *bhūyachchidranyāyana udaka pūrvo datta*.² Thus, in each instance, the words in immediate conjunction with the phrase are different, so that it would seem to have a distinct independent meaning of its own, and not to be connected with the form of words accompanying it. No attempt has hitherto been made to assign any meaning to the phrase, and I am forced to content myself with bringing together these instances of its use as a help to future inquirers.

The last phrase, *achdābhāṭapraṇesya*, is one that occurs very frequently. The last word is frequently written *praveṣya*. This phrase has generally been considered to relate to the passage or billeting of troops. Wilkins, in the first volume of the Asiatic Researches, appears to render it, "there shall be no passage for troops." Ball G. Shastree, amending a former translation of the phrase, says, "I have been satisfied that it means 'the village is not to be entered into by the troops and followers of the king.'"³ Professor Hall translates it, "exempt from the ingress of fortune tellers and soldiers," referring to Colebrooke's Digest for the meaning assigned to *chdā*,⁴ and he repeats this rendering in another grant subsequently published.⁵ There is a similar phrase in the Seoni grant, *abhāṭachchhatrapraṇesya*, which is rendered "free from military billeting." Notwithstanding this concurrence and weight of opinion, the rendering seems to me unsatisfactory. The meaning of *chdā* is cheat,

¹ Journ. Beng. A. S. vol. v. p. 477.

² Journ. Bom. R. A. S. vol. ii. p. 371. The composition of this grant, as also the reproduction and transcription, all appear to be very faulty. The transcription gives *bhūya*, but the fac-simile may be read *bhūma*. There can be no doubt that *bhūma* was intended.

³ Journ. Bom. R. A. S. vol. ii. p. 5.

⁴ Journ. Amer. Or. Soc. vol. vi. p. 541.

⁵ Journ. Beng. A. S. 1861, p. 9.

⁶ Ibid., vol. v. p. 728.

rogue, peculator, or, as above, a fortune teller; and that the word is to be taken in a disreputable sense is clear from a grant in the *Bombay Journal*,¹ where the phrase runs *achāṭabhaṭa kusiddhādam apravesya*, the meaning of *kusidda* being "money lender or usurer." The meanings usually attached to *bhaṭa* are "warrior, soldier, barbarian, outcast of a particular tribe." Now it seems incredible that the troops of the king should be associated with and placed in the same category with cheats (or fortune tellers) and usurers. Part of the phrase is certainly used in a base sense; a similar meaning ought therefore to be given to *bhaṭa* if the word will bear it, and its signification of "outcast, barbarian," seems quite in accordance with its associates. Taking this view, then, the village is to be free from the entry of cheats and outcasts; but is this a privilege conferred by the grantor or a duty imposed upon the grantee? It is difficult to conceive that a king should profess to grant such an immunity in perpetuity; while the imposition of such a restriction on the grantees would be for the general benefit of society, and a very proper provision. There can be no doubt that the majority of these conveyancing terms denote privileges conferred; but we have seen that a former one may possibly be taken as a limitation or restriction upon the grantees. If conclusive reason is found for considering any of the terms to express restrictions I should be disposed to class this last one among them.

¹ Grant No. 1. Vol. ii.

ART. XI.—*Yama and the Doctrine of a Future Life, according to the Rig-, Yajur-, and Atharva-Vedas.* By J. MUIR, Esq., D.C.L., LL.D.

[Presented September 1, 1864.]

It is only in the ninth and tenth books of the Rig Veda that there is any very distinct and prominent reference made to a future life. It is true that the Rbhus, on account of their artistic skill, are said to have been promised, and to have attained, immortality and divine honours (i. 161, 2; iv. 35, 3, 7, 8); but this is a special case of deification, and does not prove that ordinary mortals were considered to survive after the termination of their earthly existence. There are, however, a few other passages which may be understood as intimating a belief in a future state of blessedness. Thus (i. 91, 1) it is said, that "by the guidance of Soma the sage ancestors of the worshippers had obtained treasures among the gods;" and again, in v. 18, "Soma, becoming abundant to (produce) immortality, place for us excellent food in the sky." In a passage already quoted in my former paper (pp. 94 and 138), viii. 48, 3, the worshipper exclaims: "We have drunk the soma, we have become immortal, we have entered into light, we have known the gods," etc. And in i. 125, 6, it is said, "Those who bestow gifts attain immortality." So too, in i. 154, 5, we find these words, "May I attain to that beloved abode¹ of his (Vishnu's) where men devoted to the gods rejoice: for—such a friend is he—there is a spring of honey in the highest sphere of the wide-striding Vishnu." In vi. 47, 8, Indra is apostrophized as "leading his servants into a wide space, into

¹ The same word which is employed here, *pāthas*, occurs also in iii. 55, 10: "Vishnu, a protector, guards the highest abode, occupying the beloved, imperishable regions."

celestial light, into security, and prosperity." Agni, too, is said to confer, or be the guardian of, immortality, i. 31, 7; vi. 7, 7. Vâta is also declared to have a store of immortality in his house (*te gr̥he amṛtasya nidhir hitaḥ*). But this verse occurs in a late hymn (the 186th) of the tenth maṇḍala.

I now come to the passages in the ninth and tenth books to which I first alluded; and, owing to the great interest and importance of the subjects to which they refer, I shall first quote the most important parts of them at length, and then supply a summary of the conclusions which they assert or involve.

I shall begin with the brief account of Yama's parentage in the seventeenth hymn, and the dialogue betwixt him and his twin sister Yamî, in the tenth hymn, of the tenth book.

R. V. x. 17, 1.—"Tvashṭṛ makes a marriage for his daughter. (Hearing) so, this whole world assembles. The mother of Yama, becoming wedded, the wife of the great Vivasvat disappeared. 2. They concealed the immortal (bride) from mortals. Making (another) of similar form, gave her to Vivasvat. And she bore the Aṣvins when that happened. Saranyû abandoned the two pairs of twins."¹

The following hymn contains a dialogue between Yama and his twin sister Yamî, in which, according to Professor Roth, she is to be considered as urging a matrimonial union between them for the continuation of the human species, of which, in the opinion of that writer, they appear to have been regarded as the earliest pair.² In verse 4, they are

¹ Since this paper was written I have received Professor Max Müller's second series of lectures on the Science of Language. The learned and ingenious author there discusses at length the meaning of the myths regarding Vivasvat, Saranyû, and their offspring (pp. 481 ff., and 508 ff.). He understands Vivasvat to represent the sky, Saranyû the dawn, Yama originally the day, and Yamî, his twin sister, the night (p. 509). I shall briefly refer, as I proceed, to some of his further explanations, leaving the reader to consult the work itself for fuller information.

² See Professor Roth's remarks on Yama in the Journal of the German Oriental Society, iv. 426, and in the Journal of the American Oriental Society, iii. 335 f. "They are," he says, "as their names denote, twin brother and sister, and are the first human pair, the originators of the race. As the Hebrew conception closely connected the parents of mankind by making the woman formed from a portion of the body of the man, so by the Indian tradition they are placed in the relationship of twins. This thought is laid by the hymn in question in the mouth of Yamî herself, when she is made to say. 'Even in the womb the Creator made

declared to have been the offspring of the Gandharva and his wife.

R. V. x. 10, 1.¹—[Yamī says] "O that I might attract a friend to intimacy. May the sage (Yama?), after traversing a vast ocean, receive a grandson to his father, and look far forward over the earth.² 2. (Yama.) Thy friend does not desire this intimacy that (his) kinswoman should become (as) an alien. The heroes, the sons of the great Spirit, the supporters of the sky, look far and wide around (see v. 8.) 3. (Yamī.) The immortals desire this of thee, (they desire) a descendant left behind by the one sole mortal. Let thy soul be united to mine. As a husband, penetrate the body of (thy) wife. 4. (Yama.) Shall we (do) now what we have never done before? Shall we who (have been) speakers of righteousness, utter unrighteousness? The Gandharva in the (aerial) waters, and his aqueous wife³—such is our source, such is our high relationship. 5. (Yamī.) The divine Tvashṭr, the creator, the vivifier, the shaper of all forms, made us husband and wife, (while we were yet) in the womb.⁴ No one can infringe his ordinances. Earth and heaven know this of us. 6. (Yama.) Who knows this first day? Who has seen it? Who can declare it? Vast is the realm of Mitra and Varuṇa. What wilt thou, O wanton woman, say in thy thoughtlessness (?) to men? 7. (Yamī.) The desire of Yama has come upon me, Yamī, to lie with him on the

us for man and wife '" Müller, on the other hand, says, (Lect., 2nd ser., p. 410) "There is a curious dialogue between her (Yamī) and her brother, where she (the night) implored her brother (the day) to make her his wife, and where he declines her offer, 'because,' as he says, 'they have called it a sin that a brother should marry his sister '" Again, p. 421, "There is not a single word in the Veda pointing to *Yama* and *Yami* as the first couple of mortals, as the Indian Adam and Eve . . . If Yama had been the first created of men, surely the Vedic poets, in speaking of him, could not have passed this over in silence " See, however, the passage from the A. V. xviii. 3, 13, to be quoted farther on.

¹ This hymn is repeated in the A. V. xvii. 1, 1 ff. I am indebted to Professor Aufrecht for some improvements in my translation.

² This verse occurs with variations in the Sāma Veda, i. 340. The sense of it is very obscure. If the sage (*vedhas*) mean Yama, his father may be Vivasvat, or the Gandharva, and the grandson of the latter may be the son whom Yamī was desirous to bear to her twin brother (Yama). Compare the first half of verse 3.

³ Compare Müller's Lectures, second series, p. 483. He takes Gandharva for Vivasvat, and his aqueous wife (*Apyā Yashū*) for Saranyū, in accordance with Sāyana.

⁴ In like manner Tvashṭr is said, A. V. vi. 78, 3, to have formed a husband and wife for each other.

same couch. Let me as a wife bare my body to my husband. Let us whirl round like the two wheels of a chariot. 8. (Yama.) These spies of the gods who frequent this world, stand not still, neither do they wink. Depart quickly, wanton woman, with some other man than me. Whirl round with him like the two wheels of a chariot. 9. (Yamī.) Though she should wait upon him by night and by day, still the eye of the sun would open again. Both in heaven and earth twins are closely united. Let Yamī treat Yama as if she were not his sister. 10. (Yama.) Later ages shall come when kinsmen and kinswomen shall do what is unbecoming their relation. Spread thy arm beneath a male. Desire, O fair one, another husband than me. 11. (Yamī.) What is a brother, when (a woman) is left without a helper? [*i.e.*: necessity has no law.] And what is a sister, when misery (is allowed to) come upon her? Overcome by desire, I am thus importunate. Unite thy body with mine. 12. (Yama.) I will not unite my body with thine. They call him a sinner who sexually approaches his sister. Seek thy gratification with some other than me. Fair one, thy brother desires not this.¹ 13. (Yamī.)² Thou art weak, alas, O Yama; we perceive not any soul or heart in thee. Another woman shall enlace and embrace thee like a girdle, or as a creeping plant a tree. 14. (Yama.) Thou shalt embrace another man, O Yamī, and another man thee, as a creeping plant a tree. Do thou desire his heart, and he thine. Make then a fortunate alliance."³

The next hymn I quote is addressed to Yama.

R. V. x. 14, 1 (=A. V. xviii. 1, 49. Nir. x. 20).—"Worship with an oblation King Yama, son of Vivasvat, the

¹ The Atharva Veda (xviii. 1, 13, 14) expands this verse into two: "I am not in this thy helper, O Yamī; I will not unite my body with thine. Seek thy gratification with some other than me. Fair one, thy brother desires not this. I will not unite my body with thine. They call him a sinner who sexually approaches his sister. This is abhorrent to my soul and heart, that I, a brother, should lie on my sister's bed."

² This verse is quoted and explained in Nirukta vi. 28.

³ It appears from Professor Aufrecht's Catalogue of the Bodleian Sanskrit MSS., p. 82, that the Narasinha Purāṇa, i. 13, contains a dialogue between Yama and Yamī; but I am informed by Dr. Hall, who has looked at the passage, that the conversation does not appear to be on the same subject as that in the hymn before us.

assembler of men, who departed to the mighty streams,¹ and spied out the road for many. [Compare Atharva Veda, xviii. 3, 14: "Reverence ye with an oblation Yama, the son of Vivasvat, the assembler of men, who was the first of men that died, and the first that departed to this (celestial) world."] 2. Yama was the first who found for us the way. This home is not to be taken from us. Those who are now born (follow) by their own paths to the place whither our ancient fathers have departed. 3. Mâtili magnified by the Kavyas, Yama by the Angirases, and Bṛhaspati by the Rkvas—both those whom the gods magnified, and those who (magnified) the gods—of these some are gladdened by *Scadhâ*, and others by *Scadhâ*. 4. Place thyself, Yama, on this sacrificial seat in concert with the Angirases and Pitṛs. Let the texts recited by the sages bring thee hither. Delight thyself, O king, with this oblation. 5. Come with the adorable Angirases; delight thyself here, Yama, with the children of Virûpa. Seated on the grass at this sacrifice, I invoke Vivasvat, who is thy father. 6. (Nir. xi. 19). May we enjoy the good will and gracious benevolence of those adorable beings the Angirases, our ancestors, the Navagvas, the Atharvans, the Bhṛgu, offerers of soma. 7. Depart thou,² depart by the ancient paths (to the place) whither our early fathers have departed. (There) shalt thou see the two kings, Yama and the god Varuna, exhilarated by the oblation (*scadhâ*), (or, exulting in independent power). 8. Meet with the Pitṛs, meet with Yama,³ (obtain) the fulfilment of thy

¹ This is the rendering of the words *pravato mahir anu* adopted by Roth in his Illustrations of the Nirukta, p. 178. In support of this sense of mighty (celestial) waters, he refers to R. V. ix. 113, 8, which I shall quote further on, and to verse 9 of this hymn. In his article on the story of Jamshid, in the Journal of the German Oriental Society, iv. 426, he had translated the words, "from the deep to the heights," and Dr. Haug, in his "Essays on the Sacred Language, etc., of the Parsees," p. 234, similarly renders, "from the depths to the heights." In the Atharva Veda, xviii. 4, 7, however, where the same words occur, *tirthâni taranti pravato mahir iti yajñakṛtâh sukṛto yena gantî*, ("They cross by fords the great rivers, [by the road] which the virtuous offerers of sacrifice pass.") they seem more likely to mean the mighty streams. Compare Prof. Muller's Lectures, ii. 515.

² The following verses (as appears from Prof. Muller's Essay on the Funeral Rites of the Brahmins, Journal of the German Oriental Society for 1855, p. xi.) are addressed at funerals to the souls of the departed, while their bodies are being consumed on the funeral pile.

³ The A. V. xviii. 2, 21, substitutes here the words "may delightful, pleasant

desires¹ in the highest heaven. Throwing off again all imperfection go to thy home.² Become united to a body,³ and clothed in a shining form. 9. Go ye, depart ye, hasten ye from hence.⁴ The Pitṛs have made for him this place. Yama gives him an abode⁵ distinguished by day, and waters, and lights. 10. By an auspicious path do thou hasten past the two four-eyed brindled dogs, the offspring of Saramā. Then approach the bountiful (or wise) Pitṛs, who dwell in festivity with Yama (compare A. V. xviii. 4, 10). 11. Entrust him,⁶ O Yama, to thy two four-eyed, road-guarding, man-observing watch-dogs; and bestow on him prosperity and health. 12. The two brown messengers of Yama, broad of nostril and insatiable, wander about among men.⁷ May they give us again the auspicious breath of life, that

breezes blow upon thee. 22. May the water-bringing, water-shedding Maruts bear thee upward, and creating coolness by their motion (?), sprinkle thee with rain. 23. . . . May thy soul go to its own (kindred), and hasten to the Fathers."

¹ This is differently explained by Dr. Haug (Ant. Br. ii. p. 474, note). *Ishta*, he says, means "what is sacrificed," and *āpārīta*, "filled up to." "For all sacrifices go up to heaven, and are stored up there to be taken possession of by the sacrificer on his arrival in heaven." The words before us will therefore mean "join thy sacrifices which were stored up." The Atharva Veda, xviii. 2, 20, expresses the sentiment here referred to by Dr. Haug in these words: "May the oblations which thou offeredst while alive (now) drop thee honey." And in A. V. xi. 1, 36, it is said, "With these good deeds may we follow the sacrifice which abides in the heaven with seven rays."

² Müller (in the Essay just referred to, p. xiv.) translates this verse thus: "Leave evil there, then return home, and take a form," etc. This rendering makes the departed return to this world to resume his body, though in a glorified state, which does not seem to bring out a good sense. Roth, on the other hand (in Jour. Germ. Or. Society, iv. 428), connects the word *punaḥ* with what precedes, and renders the verse thus: "Enter thy home, laying down again all imperfection," etc.

³ The A. V. xviii. 2, 24, says: "Let not thy soul (*manas*), nor anything of thy spirit (*asm*), or of thy members, or of thy substance (*rasa*), or of thy body, disappear. 25. Let no tree vex thee, nor the great divine earth. Having found an abode among the Fathers, flourish among the subjects of Yama. 26. Whatever member of thine has been removed afar, or breath of thine has departed in the wind,—may the combined Fathers reunite them all with thee."

⁴ These words, according to Müller, are addressed to evil spirits.

⁵ *Avastanam*. Compare A. V. xviii. 2, 37, where Yama is said to recognise those who are his own: "I give this abode to this man who has come hither, if he is mine. Yama perceiving, says again, 'He is mine, let him come hither to prosperity.'"

⁶ See Roth, Journal German Oriental Society, iv. 428, at the foot, and his explanation of *pari dehi a.v. dā*. Müller, on the other hand (p. xiv.), translates: "Surround him, Yama, protecting him from the dogs," etc.

⁷ The two dogs of Yama are also mentioned in A. V. viii. 1, 9, where one of them is said to be black (*ryāma*) and the other spotted (*śabala*). In A. V. viii. 2, 11, the messengers of Yama who wander among men are spoken of in the plural, without being described as dogs.

we may behold the sun. 13. Pour out the soma to Yama, offer him an oblation. To Yama the sacrifice proceeds when heralded by Agni and prepared. 14. Offer to Yama an oblation with butter, and be active. May he grant us to live a long life among the gods. 15. Offer a most honied oblation to king Yama. Let this salutation (be presented) to the earliest-born, the ancient *ṛshis*, who made for us a path."

Hymn 15 of the same Maṇḍala is addressed to the *Pitṛs*, or departed ancestors, who, as we have already seen, are conceived to be living in a state of blessedness in the other world. I will quote some verses from it, which will show still further their enjoyments, powers, and prerogatives. "1 (=Vāj. Sanh. 19, 49; Nir. 11, 18). Let the lower, the upper, and the middle *Pitṛs*, the offerers of soma, arise. May these *Pitṛs*, innocuous, and versed in righteousness, who have attained to (higher) life (*asu*)¹ protect us in the sacrifices. 2. (=V. S. 19, 68). Let this reverence be to-day paid to the *Pitṛs*, who departed first, and who (departed) last, who are situated in the terrestrial sphere,² or who are now among the powerful races (the gods). . . . 5 (=V. S. 19, 57). Invited to these favourite oblations placed on the grass, may the *Pitṛs*, the offerers of soma, come, may they hear us, may they intercede for us, and preserve us. 6 (=V. S. 19, 62). . . . Do us no injury, O *Pitṛs*, on account of any offence which we, after the manner of men, may commit against you. 7 (=V. S. 19, 63). . . . Bestow wealth on the mortal who worships you. 8 (=V. S. 19, 51). May Yama feast according to his desire on the oblations, eager, and sharing his gratification with the eager *Vasishṭhas*, our ancient ancestors, who presented the Soma libation. 10. Come, Agni, with a thousand of those exalted ancient *Pitṛs*, adorers of the gods, sitters at the fire, who are true, who are eaters and drinkers of oblations, and who are received into the same chariot with Indra

¹ Compare the word *asura*, "Spirit," and *asuriti*, in v. 14, below.

² Compare A. V. xviii. 2, 49. "Let us worship with reverence those *Pitṛs* who are the fathers, and those who are the grandfathers, of our father, those who have entered into the atmosphere, or who inhabit the earth, or the sky." See also A. V. xviii. 3, 59.

and the gods. 11 (=V. S. 19, 59). Come hither, ye Agnish-vâta Pitrs, occupy each a seat, ye wise directors; eat the oblations¹ which have been arranged on the grass, and then bestow wealth on us, with all our offspring. . . . 14 (=V. S. 19, 60). Do thou, O self-resplendent god²—along with those (Pitrs) who, whether they have undergone cremation or not, are gladdened by our oblation—grant us this (higher) vitality (*asuntti*),³ and a body according to our desire.”

A funeral hymn addressed to Agni⁴ (x. 16) also contains some verses which illustrate the views of the writer regarding a future life: “1. Do not, Agni, burn up, or consume him (the deceased); do not dissolve his skin, or his body.⁵ When thou hast matured⁶ him, O Jâtavedas, then send him to the Pitrs. 2. When thou maturest him, Jâtavedas, then consign him to the Pitrs. When he shall reach that state of vitality, he shall then fulfil the pleasure of the gods. 3. Let his eye go to the sun,⁷ his breath to the wind. Go to the

¹ According to the A. V. xviii. 2, 28, evil spirits sometimes come along with the Pitrs: “May Agni blow away from this sacrifice those *Dasyus*, devourers of oblations, whether they wear gross or subtile bodies, who come, entering among the Pitrs, with the faces of friends.” Compare V. S., ii. 30, and commentary.

² As Agni is addressed in the two preceding verses, it might have been supposed that he is referred to in this epithet of self-resplendent (*svarât*) or sovereign ruler, especially as the same function is assigned to him in x. 16, 5, as is assigned to the deity addressed in this verse. But the commentator on the Vâjasaneyi Sanhitâ, 19, 60 (where the verse occurs, with most of the others in this hymn, though not in the same order), understands it of Yama: as does also Prof. Roth (see s.v. *asuntti*) in the passage of the A. V., where it occurs along with *asuntti*. See next note.

³ This word also occurs in the second verse of the next, the 16th hymn. In R. V. x. 59, 5, 6, it is personified as a god or goddess. In A. V. xviii. 3, 59, it is joined with *svarât*: “May the monarch who bestows vitality fashion for the fathers and grandfathers of our father who have entered the wide atmosphere, and for us to-day, bodies according to our desire.”

⁴ According to Müller (Funeral Rites of the Brahmans, p. xi. f.) some verses from this hymn are repeated after those from hymn 14th, while the remains of the departed are being burnt.

⁵ Compare A. V. xviii. 4, 10-13. In the sixty-fourth verse of the same hymn it is said: “Whatever limb of you Agni Jâtavedas left behind, when conveying you to the world of the Pitrs, that I here restore to you. Revel in heaven, ye Pitrs, with (all) your members.” And in A. V. xviii. 3, 55, it is declared: “Whatever (part) of thee any black bird, or ant, or serpent, or beast of prey, has torn, may Agni cure thee of all that, and Soma who has entered into the Brâhmans.” Compare v. 9 of the same hymn.

⁶ Compare A. V. xviii. 4, 12.

⁷ In A. V. viii. 2, 3, a man dead, or in danger of dying, is addressed in these words: “I have obtained thy breath from the wind, thine eye from the sun; I place in thee thy soul (*manas*): have sensation in thy limbs; speak, uttering (words) with thy tongue.” Compare Plato Repub. vi. 13, where he says of the

sky, and to the earth, according to (the) nature (of thy several parts); or go to the waters, if that is suitable for thee; enter into the plants with thy members. 4. As for his unborn part, do thou (Agni) kindle it with thy heat; let thy flame and thy lustre kindle it; with those forms of thine which are auspicious, convey it to the world of the righteous.¹ 5. Give up again, Agni, to the Pitr̥s him who comes offered to thee, with oblations. Putting on life, let him approach (his) remains; let him meet with his body, O Jātavedas."

I shall now extract from these texts and others a summary of the information which they supply.

Yama is the son of Vivasvat (ix. 113, 8; x. 14, 1 [—A.V. xviii. 1, 49]; x. 14, 5; x. 58, 1; x. 60, 10), and of Saranyū, the immortal daughter of Tvashtṛ (x. 17, 1, 2). He is elsewhere said, as Professor Roth considers,² (see above) to have

αγο· ἄλλ' ἡλαιοειδέστατον γε εἶμαι τῶν περὶ τὰς ἀισθήσεις ὀργάνων. See also Atharva Veda, v. 24, 9; xi. 8, 31, xix. 43, 3.

¹ In A. V. vi. 120, 1, Agni is prayed to deliver from sin and carry to the world of righteousness. Compare A. V. xii. 2, 45; xviii. 3, 71, and xviii. 4, 9, 10, where the different fires are besought to assume their most beneficent forms, and to become horses to bear the worshipper to heaven, after cremation. In xviii. 2, 36, Agni is entreated to burn mildly, and to spend his fury on the woods and on the earth.

The Taittiriya Brāhmaṇa has the following passage—iii. 10, 11, 1—"One man departing from this world knows himself that 'this is I myself.' Another does not recognize his own world. Bewildered by Agni, and overcome by smoke, he does not recognize his own world. Now he who knows this Agni Sāvitra, when he departs from this world knows himself, 'that this is I myself.' He recognizes his own world. This Sāvitra carries him to the heavenly world." A few lines further on it is said that the days and nights suck up in the next world the treasure of the man who does not possess a particular sort of knowledge, whilst he who knows Agni Sāvitra finds his treasure not sucked up.

² Journal of the German Oriental Society, iv. 426, Journal of American Oriental Society, iii. 335. Illustrations of Nirukta, p. 138. As Professor Müller denies that Yama was regarded as the first man, he explains as follows. Lectures, 2d Series, p. 515 f.) the process by which he came to be transformed into the monarch of the dead. "Let us imagine, then," he says, "as well as we can, that yama, twin, was used as the name of the evening, or the setting sun and we shall be able perhaps to understand how in the end Yama came to be the king of the departed and the god of death. As the East was to the early thinkers the source of life, the West was to them *nyctis*, the *exodus*, the land of death. The sun, conceived as setting or dying every day, was the first who had trodden the path of life from East to West—the first mortal—the first to show us the way when our course is run, and our sun sets in the far West." . . . "That Yama's character is solar, might be guessed from his being called the son of Vivasvat. Vivasvat, like Yama, is sometimes considered as sending death. R. V. viii. 67, 20 'May the shaft of Vivasvat, O Adityas, the poisoned arrow, not strike us before we are old.'" [On the other hand Vivasvat is sometimes spoken of as preserving from Yama. Thus in A. V. xviii. 3, 62, it is said "May Vivasvat place us in a state of immortality. May death pass away, and deathlessness come to us. May he preserve these men from decay. May their spirits not depart

been one of the original pair of human beings (x. 10, 2), and to have sprung from the Gandharva, a deity of the atmosphere, and his wife (x. 10, 4). In the same hymn (*passim*) he is declared to have resisted the solicitations of his twin-sister Yamī to form a sexual union with her for the continuation of the species.¹ He was the first of mortals who died, and discovered the way to the other world; he guides other men thither, and assembles them in a home, which is secured to them for ever (x. 14, 1, 2; A.V. vi. 28, 3; xviii. 1, 49, 50; xviii. 8, 13).² In one place he is represented as carousing with the gods under a leafy tree (R.V. x. 135, 1).³ He is a king and dwells in celestial light in the innermost sanctuary of heaven (ix. 113, 7, 8), where the departed behold him associated in blessedness with Varuṇa (x. 14, 7). He grants luminous abodes in heaven to the pious (x. 14, 9), who dwell with him in festive enjoyment (x. 14, 8, 10). In the A.V. (xviii. 2, 32) he is said to be superior to Vivasvat, and to be himself surpassed by none.

In the Rig Veda Yama is nowhere represented (as he is in the later Indian mythology),⁴ as having anything to do with

to Yama."—J. M.] "His (Yama's) own seat is called the house of the gods (x. 135, 7), and these words follow immediately on a verse in which it is said: 'the abyss is stretched out in the East, the outgoing is in the West.' (In a note the following are referred to as additional passages to be consulted, viz., R.V. i. 116, 2; vii. 33, 8; ix. 68, 3, 5; x. 12, 6; x. 13, 2, 4; x. 53, 3; x. 64, 3; x. 123, 6.) "These indications, though fragmentary, are sufficient to show that the character of Yama, such as we find it in the last book of the Rig Veda, might well have been suggested by the setting sun, personified as the leader of the human race, as himself a mortal, yet as a king, as the ruler of the departed, as worshipped with the fathers, as the first witness of an immortality to be enjoyed by the fathers," etc. I may remark that in the S. P. Br. xiv. 1, 3, 4, Yama is identified with the sun; but he is, a little further on, xiv. 2, 2, 11, similarly identified with Vāyu.

¹ See Prof. Roth's observations on this dialogue in the Journal of the American Oriental Society, iii. 335 f.

² See Prof. Roth's remarks on these passages in the Journals, etc., above referred to. In the Journal of the German Oriental Society, iv. 427, he remarks on these hymns. "We here find, not without astonishment, beautiful conceptions on immortality expressed in unadorned language with childlike conviction. If it were necessary, we might here find the most powerful weapons against the view which has lately been revived, and proclaimed as new, that Persia was the only birth-place of the idea of immortality, and that even the nations of Europe had derived it from that quarter; as if the religious spirit of every gifted race was not able to arrive at it by its own strength."

³ In A.V. xviii. 4, 3, the Ādityas are said to feast on honey in heaven (*madhu bhakṣayanti*).

⁴ According to the Purāṇas, "Yama fulfils the office of judge of the dead, as

the future punishment of the wicked. In fact, the hymns of that Veda contain, as far as I am aware, no prominent mention of any such penal retribution. [The passages which appear to recognize the existence of a Tartarus will be quoted further on.] But Yama is still to some extent an object of terror. In x. 14, 10-12 he is represented as having two insatiable dogs with four eyes and wide nostrils, which guard the road to his abode, and which the departed are advised to hurry past with all possible speed. These dogs are said to wander about among men as his messengers (x. 14, 12), no doubt for the purpose of summoning them to the presence of their master, who is in another place (x. 165, 4) identified with death, and is described as sending a bird as the herald of doom (compare A.V. vi. 29, 1 ff.) And in a verse of the A.V. (xviii 2, 27), death is said to be the messenger of Yama, who conveys the spirits of men to the abode of their forefathers. In another place (R.V. x. 97, 16) deliverance is sought from the bonds (*padbīṣa*) of Yama, as well as those of Varuṇa. In R.V. i. 38, 5, too, where it is said, "Let not thy worshipper go along the road of Yama," Yama is equivalent to death. In the following verse of the A.V. vi. 28, 3, also, Yama is identified with *mṛtyu* (death): "Reverence be to Yama, death, who first reached the river, spying out the road for many, who is lord of these two-footed and four-footed creatures." (This verse coincides in part with R.V. x. 14, 1, quoted above).

When the remains of the deceased have been placed upon the funeral pile, and the process of cremation has begun, Agni, the god of fire, is prayed not to scorch or consume the departed, not to tear asunder his skin or his limbs, but after the flames have done their work, to convey to the Fathers (the

well as sovereign of the damned; all that die appearing before him, and being confronted with Chandra Gupta, the recorder, by whom their actions have been registered. The virtuous are thence conveyed to Swarga or Elysium, whilst the wicked are driven to the different regions of Naraka, or Tartarus" (Wilson, Vishnu Purāṇa, p. 207 of 4to. ed. note 3). Chitragupta is described in the following tasteless and extravagant style in the Vebannāradya Purāṇa, quoted in Prof. Aufrecht's Catalogue of the Bodl. Sansk. MSS p. 10, note: "The dreadful Chandra Gupta, with a voice like the clouds at the mundane dissolution, gleaming like a mountain of bellurum, terrible with lightning-like weapons, having thirty-two arms, as big as three yojanas, red-eyed, long-nosed, his face furnished with grinders and projecting teeth, his eyes resembling oblong ponds, bearing death and diseases."

Pitrs) the mortal who has been presented to him as an offering. The eye of the departed is bidden to go to the sun; his breath (*âtma*) to the wind; and his different members to the sky, the earth, the waters, or the plants, according to their several affinities. As for his unborn part (*ajo bhâgaḥ*), Agni is supplicated to kindle it with his heat and flame, and assuming his most auspicious form, to convey it to the world of the righteous (x. 16, 1-5; Vâj. Sanh. xviii. 51).¹ Before, however, the "unborn part" can complete its course from earth to the third heaven, it has to traverse a vast gulf of darkness.² Leaving behind on earth all that is evil and imperfect, and proceeding by the paths which the fathers trod (R.V. x. 14, 7), the spirit, invested with a lustre like that of the gods (A.V. xi. 1, 37), soars to the realms of eternal light (ix. 113, 7), in a car, or on wings (A.V. iv. 34, 4), on the undecaying pinions wherewith Agni slays the Rakshases (Vâj. Sanh. xviii. 52), wafted upwards by the Maruts, fanned by

¹ In the Ś. P. Br. xi. 1, 9, 1, a man is said to be thrice born; first from his father and mother, the second time through sacrifice, and the third time when, after death and cremation, he once more emerges into life.

² A.V. ix. 5, 1: "Convey him; carry him; let him, understanding, go to the world of the righteous. Crossing the gloom in many directions immense, let the unborn ascend to the third heaven. . . . 3. Wash the feet of him who has committed wickedness: understanding, let him ascend with cleansed feet. Crossing the gloom, gazing in many directions, let the unborn ascend the third heaven." In the Vâj. Sanh. xxxi. 18, also, the great Purusha of sunlike brightness (*âditya-varṇa*) is said to dwell above the darkness (*tamasah parastât*). See also Manu, iv. 242. The commentator on this passage, however, as well as Roth, s. v. *tamas*, understands the phrase *dustaram tamas*, "darkness hard to cross," as referring to hell. Compare the phrases *adhamam tamas* and *andham tamas*, to be referred to further on.

The word *aja* seems to have different senses in the hymn of the A.V. just quoted. In verses 1 and 3, it may mean the same as *ajo bhâgaḥ*, the "unborn part" of man, in R.V. x. 16, 4. In A.V. v. 7, it is said "Agni is unborn (*aja*); they call light unborn (*aja*); they say that an *aja* is to be given by a living man to the priest. An *aja* when given in this world by a believing man, disperses the gloom afar." In the latter part of this sentence *aja* is some kind of offering. In the same way it is said in v. 10: "The *aja panchaudana*, given to a priest, places him who bestows it in the third heaven, in the third sky, on the third summit, on the top of the heaven," and in v. 21: "This *aja panchaudana* is an illimitable offering."

"The world of the righteous" (*sukṛtām lokah*) referred to in the preceding passage (A.V. ix. 5, 1) is also mentioned in the Vâjasaneyya Sanhitâ, xviii. 52: "With those fleet, undecaying, pinions wherewith, O Agni, thou slayest the Rakshases, let us soar to the world of the righteous, whither the ṛshis have gone, the early, the ancient." In the A.V. xviii. 2, 48, there are said to be three heavens: "The watery (*udānvatī*) heaven is the lowest, the *pīlumatī* is the intermediate heaven, and the third is the *pradyaus*, in which the Fathers dwell." This agrees with the mention of the third heaven in A.V. ix. 5, 1.

soft and gentle breezes, and refrigerated by showers (A.V. xviii. 2, 21 ff.); recovers there its ancient body in a complete (A.V. xviii. 2, 24 ff.¹) and glorified form,² meets with the Pitr̥s or forefathers who are living in festivity with Yama, obtains from him, when recognized by him as one of his own, (A.V. xviii. 2, 37) a delectable abode (R.V. x. 14, 8-10; x. 15, 14), and enters upon a more perfect life (R.V. x. 14, 8; x. 15, 14; x. 16, 2, 5), which is crowned with the fulfilment of all desires (ix. 113, 9, 11), is passed in the presence of the gods (x. 14, 14), and employed in the fulfilment of their pleasure (x. 16, 2). In the following passages of the A.V. an expectation is expressed that the family relations will be maintained in the next world:—

xii. 3, 17: "Do thou conduct us to heaven; let us be with our wives³ and children."

vi. 120, 3: "In heaven, where our virtuous friends enjoy blessedness, having left behind the infirmities of their bodies, free from lameness or distortion of their limbs, may we behold our parents and our children."

ix. 5, 27: "When a woman has had one husband before, and gets another, if they present the *aja panchaudana* offering, they shall not be separated. 28. A second husband dwells in the same world with his re-wedded wife, if he offers the *aja panchaudana*, etc.

xviii. 2, 23: "Let thy soul (*manas*) go to its own, and hasten to the fathers."

The enjoyments of this future state are said in R.V. ix. 113, 7 ff. to be conferred by the god Soma, and are described as

¹ In A.V. ix. 5, 22-26 it is said that the man who bestows an *aja panchaudana* illuminated by largesses (*dakṣinā-ṣyotisham* - compare *hiraṇya-ṣyotisham*, A.V. x. 9, 6), shall not have his bones broken, or his marrow sucked out, but shall be introduced whole and entire (into heaven).

These passages in which the departed are said to recover their bodily organization in all its completeness form a striking contrast to the representation in the Homeric poems regarding the unsubstantial nature of the ghosts of the departed. The passage of the *Odyssey*, xi. 488, is well known in which Achilles tells Ulysses that he would rather be the slave of a poor man on earth than rule over all the departed.

² In regard to the celestial body, see Roth in the *Journal of the Amer. Orient. Society*, vol. iii. p. 343.

³ In the later Indian writings the widow who burns herself on her husband's funeral pile is supposed to rejoin him in Svarga. See the texts cited by Colebrooke, *Essays*, i. 116 f.

follows: 7. "Place me, O purified (Soma) in that imperishable and unchanging world, where perpetual light and glory are found. 8. Make me immortal (in the realm) where king Vaivasvata (Yama) dwells, where the sanctuary of the sky exists, and those great waters (flow). 9. Make me immortal in the third heaven, in the third sky, where action is unrestrained,¹ and the regions are luminous. 10. Make me immortal in the world where there are pleasures and enjoyments—in the sphere of the sun,—where ambrosia and satisfaction are found. 11. Make me immortal in the world where there are joys, and delights, and pleasures, and gratifications; where the objects of desire are attained."

The pleasures here referred to are most probably to be understood as of a sensual kind.² Such at least is the prospect held out in the following passage of the Atharva Veda, iv. 34, 2:

A.V. iv. 34, 2: "Boneless, pure, cleansed by the wind, shining, they go to a shining region; Agni³ does not consume their generative organ; in the celestial sphere they have abundance of sexual gratification.⁴ 3. Want never comes upon

¹ "In heaven he acts according to his pleasure."—Taitt. Br. iii. 12, 2, 9.

² Roth is, however, of a different opinion. He says (Journ. Amer. Orient. Soc. iii. 343) "The place where these glorified ones are to live is heaven. In order to show that not merely an outer court of the divine dwellings is set apart for them, the highest heaven, the midst or innermost part of heaven, is expressly spoken of as their seat. This is their place of rest; and its divine splendour is not disfigured by any specification of particular beauties or enjoyments, such as those with which other religions have been wont to adorn the mansions of the blest. . . There they are happy: the language used to describe their condition is the same with which is denoted the most exalted felicity." He then quotes the verses of ix. 113, 7 ff. already adduced, and adds: "what . . . shall be the employment of the blest, in what sphere their activity shall expend itself; to this question ancient Hindu wisdom sought no answer."

The words used in v. 11 of hymn ix. 113 to denote the gratifications of paradise, viz. *duṣṇāḥ*, *modāḥ*, *pramudāḥ*, are employed in the Taittiriya Brāhmaṇa, ii. 4, 6, 6 f. to signify sexual enjoyment on earth.

³ This, no doubt, alludes to the fire of the funeral pile.

⁴ Compare Mahābhārata, xii. 3667: "Thousands of handsome Apsarases run up in haste to the hero who has been slain in battle, (exclaiming) 'be my husband.'" And again, v. 3667: "Behold, these shining worlds belong to the fearless, filled with maidens of the Gandharvas, and yielding all kinds of enjoyments." In like manner, the Katha Upanishad, i. 25, appears to refer to the Apsarases: "Ask at thy pleasure," says Yama to Nachiketas, all those pleasures which are difficult to be had in the world of mortals, those fair ones with their cars and instruments of music—for such as they are not to be obtained by men,—receive them from me, and allow thyself to be waited on by them." See also the Kaushitaki Upanishad, as translated by Weber, Ind. Stud. i. 398, and Cowell, Bibliotheca Ind. p. 147.

those who cook the *vishtārt* oblation. (Such a man) abides (?) with Yama, goes to the gods, and lives in blessedness with the Gandharvas, the quaffers of soma. 4. Yama does not steal away the generative power of those who cook the *vishtārt* oblation. (Such a man) becomes lord of a chariot on which he is borne along; becoming winged, he soars beyond the sky." In that region the faithful are also promised ponds filled with clarified butter, honey, wine, milk and curds (v. 6).

It is clear, in fact, that in the Vedic age the gods themselves were not regarded as possessing a purely spiritual nature, but as subject to the influence of various sensual appetites. We have formerly seen how constantly they are represented as delighting in the soma juice and in the exhilaration which it produced. Yama is described as carousing with the gods (R.V. x. 135, 1), the Ādityas as eating honey (A.V. xviii. 4, 3), and the Pitrs as indulging in festivity or revelry (*sadhamādam madanti*) with Yama (R.V. x. 14, 10; compare A.V. xviii. 4, 10). Indra is said in R.V. iii. 53, 6, to have a handsome wife, and pleasure, in his house. In two verses of the A.V. xiv. 2, 31f., the young bride is encouraged to ascend the nuptial couch, and become the mother of children, by the consideration that the gods had been the first to enter into the married state and indulge in carnal intercourse with their spouses (*samasprṣanta tanvas tanūbhiḥ*). In A.V. iv. 37, 11f., the Gandharvas, a class of gods, who are described as hairy like dogs and monkeys, but as assuming a handsome appearance to seduce the affections of earthly females, are called upon to desist from this unbecoming practice, as they had wives of their own, the Apsarases. (Compare vv. 2-7 of the same hymn and A.V. xiv. 2, 35). If even the gods were imagined by the authors of these hymns to have such a decided element of carnality in their nature, it is scarcely to be supposed that these same poets, or their contemporaries, or immediate predecessors, should have risen to the conception of a purely spiritual heaven as the reward of a virtuous life upon earth.¹

¹ It may be objected that the texts which I have cited from the A.V. furnish no

In one passage of the A.V. iii. 29, 3, immunity from taxation is held out as a boon to be anticipated in the next world. It is there said that the offerer of a black-footed sheep "ascends to the sky where no tribute is paid by the weak to the stronger; and in v. 5 it is promised that a person of the same description shall "live for ever in the sun and moon."

The virtues for which men are admitted to the realms of the blessed are thus described in hymn 154 of the tenth book of the R.V. 1. "Soma is purified for some; others seek after clarified butter. Let him (the deceased) depart to those for whom the honied beverage flows. 2. Let him depart to those who through rigorous abstraction (*tapas*) are invincible, who through *tapas* have gone to heaven; to those who have performed great *tapas*. 3. Let him depart to the combatants in battles, to the heroes who have there sacrificed their lives, or to those who have bestowed thousands of largesses. 4. Let him depart, Yama, to those austere ancient Pitrs, who have practised and promoted sacred rites. 5. Let him depart, Yama, to those austere Rshis, born of rigorous abstraction, to those sages, skilled in a thousand sciences, who guard the sun."¹

The following verses also proclaim the reward of liberality, a virtue which the Brahmins, who are its objects, have always been forward to extol:

R.V. i. 125, 5: "The man who satisfies others by his liberality abides settled on the summit of the sky; he goes to the gods; to him the flowing waters carry butter; this cow overflows for him continually. 6. These wonderful things belong to those

proof of the meaning of those in the Rig Veda, as the former collection is of later date than the latter. But (1) the hymns of the A.V. are probably not much posterior to those of the tenth book of the R.V., with which I have been dealing; and (2) the state of opinion reflected in the texts of the A.V. need not be supposed to have originated contemporaneously with its expression in these particular hymns, but was probably handed down from a previous period. We ought not to be too incredulous as to the early existence, in an elementary form, of ideas which appear at first sight to bear the character of a later age. Thus we find in the A.V. x. 8, 4¹, a reference to three qualities (*gunas*) as enveloping the lotus with nine gates, and there is perhaps no reason to doubt that here the three *gunas*, so well known in later cosmogonies, are referred to. *Rajas* and *tamas*, two of these qualities, are mentioned together, A.V. viii. 2, 1. The "name" and "form" (*nāma* and *rūpa*) celebrated by the Vedantists, are also alluded to in A.V. x. 2, 12, and xi. 7, 1.

¹ These verses form part of the funeral liturgy of the Brahmins. See Müller, on the funeral rites of the Brahmins, p. xi.

who give gifts; for them there are suns in the sky. Those who give gifts attain immortality; they prolong their lives."

R.V. x. 107, 2: "Those who bestow gifts mount aloft in the sky. The givers of horses abide with the sun. The givers of gold obtain immortality. Those who bestow raiment, O Soma, prolong their lives . . . 8. Liberal men do not die, nor suffer destruction. The liberal are not injured or distressed. Liberality confers on them everything, both this entire world, and heaven."

The Pitrs, or Fathers, who have attained to the heavenly state are described as being objects of adoration to their descendants. They are said to be of different classes, upper, intermediate, and lower, or those who inhabit the heaven (or sky), the air and the earth (R.V. x. 15, 1; A.V. xviii. 2, 49), while in the verse preceding the one last quoted (A.V. xviii. 2, 48), we are told that there are three heavens, of which the Fathers occupy the third or highest. Their different races are mentioned by name, viz. Angirases, Vairûpas, Naragvas, Atharvans, Bhṛigus, Vasishṭhas, etc. (R.V. x. 14, 4-6; x. 15, 8). Though not all known to their worshippers, they are known to Agni (x. 15, 13). Their descendants offer them worship and oblations (x. 15, 2, 9), supplicate their good will (x. 14, 6), deprecate their wrath on account of any offences which may have been committed against them (x. 15, 6), entreat them to hear, intercede for, and protect their votaries (x. 15, 5), and to bestow upon them opulence (x. 15, 7, 11; A.V. xviii. 3, 14; xviii. 4, 62).¹ They are represented as thirsting for the libations prepared for them on earth (x. 15, 9); and they are invited to come with Yama, his father Vivasvat, and Agni, and feast with avidity, and to their hearts' content, on the sacrificial food (x. 14, 4, 5; x. 15, 9). They accordingly arrive in thousands, borne on the same car with Indra and the other gods, and range themselves in order on the sacrificial ground (x. 15, 10, 11).²

¹ In R.V. x. 63, 11, it is said that "the Fathers have adorned the sky with stars as a dark horse with golden ornaments, and have placed darkness in the night, and light in the day."

² Compare on the offerings to the Pitrs, Colebrooke's *Essay on the Religious Ceremonies of the Hindus*. *Mis. Essays*, i. 160 ff.

With these ideas compare those entertained by the Romans about the Manes (see Smith's Dictionary of Greek and Roman Biography and Mythology, *s.v.*) and the opinions of the unreformed Christian Churches about the powers and prerogatives of the saints.

The following texts refer indistinctly to some punishment of the wicked :

R.V. iv. 5, 5: "This deep abyss (*pada*) has been produced (for those who) being wicked, false, untrue, go about like women without brothers, like females hostile to their husbands."

R.V. vii. 104, 3: "Indra and Soma, dash those malicious (Rakshases) into the abyss (*patre*), into bottomless darkness, so that not even one of them may get out," etc.

But this last text forms part of a hymn which refers to evil spirits.

R.V. ix. 73, 8: "Knowing, he (Soma) beholds all worlds; he hurls the hated and irreligious into the abyss," (*karte*).

In A.V. viii. 2, 24, the nethermost darkness (*andham tamas*) is mentioned: "These men do not die, nor go to the nethermost darkness." See also A.V. ix. 2, 4, 9, 10, and 17; x. 3, 9; xii. 3, 49; xiii. 1, where similar phrases occur (associated in one place, x. 3, 9, with *asūrtam rajas*, the distant (?) region); and xviii. 3, 3, where the expression, *andham tamas*, "blind darkness," is found.¹ But it is not clear that in these passages the words denote a place of punishment. In A.V. xii. 4, 36, however, the adjective form of the ordinary word for hell (*nāraka loka*) occurs; and that region is threatened as the future abode of the illiberal.

In the following passages of the Mahābhārata (xii. 6969 f.) hell and darkness (*tamas*) are identified: "Falsehood is the embodiment of darkness (*tamas*): by darkness a man is carried downwards. Those who are seized by darkness, being enveloped in darkness, do not see the light. Heaven they say is light (*prakāśa*), and hell is darkness (*tamas*)."²

¹ Manu, however, viii. 94, connects *andham tamas* with hell, saying that a lying witness goes to hell in "blind darkness."

² Compare Vishnu Purāṇa (Wilson, 4to. ed., p. 211) "Heaven is that which delights the mind: hell is that which gives it pain; hence vice is called hell;

In one of the passages which have been quoted above (x. 16, 4) the "unborn part" of man is spoken of as being conveyed by Agni to "the world of the righteous." It will be observed that the word here employed is different from *âtman*, the term which at a later period was invariably used to denote the immaterial soul; and that this same word *âtman* occurs in the preceding verse in the sense of breath, as we must infer from the fact of its being bidden to mingle with the wind, the element to which it is akin. In some other passages of the Rig Veda we find the word *manas* employed for the soul, or the living principle which exists after death. Thus in x. 58, 1, it is said, "When thy soul (*manas*) has gone afar to Yama Vaivasvata, we bring it back hither to dwell and to live." In the verses which follow the soul is said to be brought back from a great many other places, the heaven, the earth, the four quarters of the sky, the ocean, the waters, the planets, the sun, the dawn, the past, the future, etc. And again in x. 60, 10, we find the same word employed: "I have brought the soul (*manas*), that it may live and not die, but be secure." *Âtman* is however used in some parts of the Rig Veda for the animating principle, as where the sun is called the soul of all things moving and stationary (i. 115, 1), or where Soma is called the soul of sacrifice (ix. 2, 10; ix. 6, 8), and of Indra (ix. 85, 3).

I shall now adduce some passages from other Indian works of a later date, such as the *Śatapatha Brâhmaṇa*, the epic poems and the *Purâṇas*, to show how far the opinions which their authors entertained coincide with those representations of a future life which I have extracted from the Rig-, Yajur-, and Atharva-Vedas.

In the 9th vol. of the Journal of the German Orient. Soc. (pp. 237 ff.) Professor Weber has communicated a legend from the *Śatapatha Brâhmaṇa* on penal retribution after death, to which he has prefixed some interesting remarks on the history of Indian opinion regarding the vanity of personal existence, and the desire to escape from the perpetual cycle of births to

virtue is called heaven," (*manah-priti-karah vearga narakas tad-viparyayaḥ | narakā-avarga-saṁjñe vai pāpa-puṇya dviḥjātamaḥ*).

which that opinion conducts. He remarks that owing to the fragmentary nature of the surviving documents of Indian literature, we are not yet in a position to trace with any distinctness the rise and growth of the doctrine of transmigration; though he considers it to admit of no doubt that the tenet in question was gradually developed in India itself, and not introduced from any foreign country. In the hymns of the Rig Veda, as he goes on to observe, there is no trace discoverable of the metempsychosis, or of any disgust with personal existence. On the contrary, they manifest a cheerful enjoyment of life, and a desire for its prolongation in this world, as well as in the next. "So too," Professor Weber proceeds, "in the Brāhmaṇas immortality, or at least longevity, is promised to those who rightly understand and practise the rites of sacrifice, while those who are deficient in this respect depart before their time (*purā ha dyushah*)¹ to the next world, where they are weighed in a balance (xi. 2, 7, 33)² and receive good or evil according to their deeds. The more sacrifices any one has offered, the more ethereal is the body he obtains, or as the Brāhmaṇa expresses it (x. 1, 5, 4)³ the more rarely does he need to eat. In other texts, on the contrary (iv. 6, 1, 1; xi. 1, 8, 6; xii. 8, 3, 31),⁴ it is promised as the highest reward, that the pious

¹ Compare Ś. P. Br. x. 4, 3, 1, where the expression *purā jarasah* is found; as it is also R. V. viii. 56, 20, and A. V. x. 2, 30; xi. 3, 56. *Purā ha dyushah suriyate* occurs in Ś. P. Br. ii. 1, 4, 9; *na purā dyushah evakāmi preyāti* in x. 2, 6, 7; and *sarvam āyur eti* in x. 2, 6, 19.

² The passage (xi. 2, 7, 33) to which Weber has referred, runs as follows: "For in the next world they place (his good and evil deeds) in a balance. Whichever of the two shall ascend, that he shall follow, whether it be good or evil. Now, whosoever knows this, places himself in the balance in this world; and is freed from being weighed in the next world: it is by good deeds, and not by bad, that (his scale) ascends."

³ x. 1, 5, 4. "Then as regards the powers of the sacrifices. In the next world the offerer of an Agnihotra eats morning and evening. So much nourishment resides in that sacrifice. The performer of the Darśapūrṇamāsa sacrifice eats every fortnight, the performer of the Chāturmāsya every four months, the performer of the Paśubandha every six months, the offerer of the Soma every year, whilst the kindler of fire eats every hundred years, or abstains at his pleasure. This means that during this period of a hundred years, he enjoys an immortal, unending and unlimited life. He who so knows this, enjoys in the same way this immortal, unending, and unlimited existence. Whatever part of him is separated even as if by a straw becomes immortal, unending, and unlimited."

⁴ iv. 6, 1, 1. "This sacrificer is born with his whole body (*sarvatanūḥ*) in the next world."

xi. 1, 8, 6. "This sacrifice becomes in the next world the soul of the sacrificer."

man shall be born in the next world with his entire body (*sarvatanûr eva sângaḥ*). Here the high-estimation of individual existence culminates, and a purely personal immortality is involved. It is evidently in connection with this that the loss of a dead man's bones, which according to the custom prescribed by the Sâtras should be collected after cremation, is regarded by his friends as disgraceful, as the severest punishment of arrogance (xi. 6, 3, 11; xiv. 6, 9, 28)."¹

[The following passage from the same work (x. 4, 3, 9) is not really inconsistent with the above view, though at first sight it might appear so. For the gods must be supposed, according to the story, to have become immortal without parting with their bodies; whereas men were not to enjoy immortality without "shuffling off their mortal coil." A subsequent resumption of their bodies in a glorified state is not, however, thereby excluded: "Death said to the gods (who had become immortal by performing certain rites), 'in the very same way all men (also) shall become immortal; then what portion will remain for me?' The gods replied, 'Henceforward no other being shall become immortal with his body, when thou shalt have seized that part (the body). Now every one who is to become immortal through knowledge or by work, shall become immortal after parting with his body.' This which they said 'by knowledge or by work,' means that knowledge which is Agni, that work which is Agni."]

The sacrificer who, knowing this, sacrifices with an expiation, is born with his whole body in the next world."

x. 8, 3, 31. "He who is consecrated by the Saṁtrâmanî enters the worlds, and among the gods. He then and is born entire with his whole body and limbs (*kyâna eva sarvatanûḥ sangaḥ sambharati*). " In the A V. xi. 3, 32, and 49, it is said "This *oḍana* (boiled rice) is complete in its limbs, joints, and body. He who knows this is born complete in limbs, joints, and body (*sarvaṅgaḥ sarva-jarūḥ sarva-linukḥ*)"

¹ xi. 6, 3, 11. "Do not scrutinize too far the deity which ought not to be too far scrutinized. Thou shalt die before such a time: not even thy bones shall reach thy home. So he died, and robbers carried off his bones, taking them for something else. Wherefore let no man be contentious."

xi. 6, 9, 28 (Bṛhad Aranyaka Upanishad, ii. 9, 26, p. 210 f. of Roer's English translation) "I ask thee regarding this Puruṣa of the Upanishads. If thou shalt not explain him to me, thy head shall fall off. Śākalya did not understand this Puruṣa. So his head fell off, and robbers carried off his bones, taking them for something else." (Compare 1 Kings xiii. 22; and Jeremiah viii. 1, 2).

Professor Weber proceeds: "But whereas in the oldest times, immortality in the abodes of the blessed, where milk and honey flow (xi. 5, 6, 4)¹ is regarded as the reward of virtue or wisdom, whilst the sinner or the fool is, after a short life, doomed to the annihilation of his personal existence, the doctrine of the Brâhmanas is that after death all are born again in the next world, where they are recompensed according to their deeds, the good being rewarded and the wicked punished (vi. 2, 2, 27; x. 6, 3, 1; xi. 2, 7, 23)."²

[The Śatapatha Brâhmana, however, also contains the conception of a higher state than that of desire and gratification, in a passage (x. 5, 4, 15) where it is said: "This soul is the end of all this. It abides in the midst of all the waters. It is supplied with all objects of desire. For the waters are all the objects of desire."³ This (soul) is free from desire, and (yet) possesses all the objects of desire, for it desires nothing. On this subject there is this verse: 'By knowledge man ascend to that condition in which desires have passed away. Thither gifts do not reach, nor austere devotees who are destitute of knowledge.'⁴ For a person who does not possess this knowledge does not attain that world by gifts or by rigorous abstraction. It pertains only to those who have such knowledge."]

Prof. Weber adds in a note: "According to a very ancient conception, the soul, after being breathed forth from the body,

¹ xi. 5, 6, 3 f. "Study of the Vedas in the Brahma-sacrifice. . . . Whoever, knowing this, practices the study of the Vedas, conquers thrice as vast a region—and that, too, undecaying—as the region which he conquers who bestows this whole earth filled with wealth. Wherefore study of the Vedas is to be practised. 4. Verses of the Rk are oblations of milk to the gods. He who, knowing this, daily studies the Rig Veda, does in fact satisfy the gods with oblations of milk: and they, when satisfied, satisfy him with prosperity, with breath, with seminal fluid, in his entire being, with all pure possessions, and bring streams of butter, and honey, and oblations to the Pitṛa." (Compare Śatap. Br. xi. 5, 7, 6; and A. V. iv. 34, 6, 7.)

² vi. 2, 2, 27. "Hence they say that a man is born into the world which he has made."

³ x. 6, 3, 1. "Now truly this man is composed of sacrifice. So many sacrifices as he has when he departs from this world, with so many is he born in the other world after his death."

⁴ Compare Taitt. Br. iii. 12, 2, 6: "In the waters all objects of desire are contained."

⁵ This verse is quoted in Sankara's Commentary on the Brahma Sūtras, pp. 911 and 952, of the edit. in Bibl. Ind.

ascends to the abodes of the blessed on the wings of the air, of the wind (compare A.V. xviii. 2, 21 f. quoted above), having itself been changed into an aerial form.¹ With this is connected the later idea of the resolution of the senses of the dying into fire, sun, moon, wind, and the regions of the sky;² and the still more modern and systematic notion of their being resolved into the five elements. In one place (i. 9, 3, 10)³ I find the idea that the rays of the sun are themselves the pious (*sukṛtāḥ*); and in another (vi. 5, 4, 8)⁴ the conception that the stars are the lights of the righteous who go to heaven. With this the similar statement in the *Indralokāgama* may be compared."

The following are some other passages of the *Brāhmaṇas* (not cited by Prof. Weber) regarding future rewards. In the *Ś. P. Br.* xi. 6, 2, 5, it is said: "He who sacrifices thus obtains perpetual prosperity and renown, and conquers for himself an union with these two gods (*Āditya* and *Agni*), and an abode in the same sphere." In the same work (ii. 6, 4, 8) it is said that those who offer particular sacrifices become *Agni*, *Varuṇa*, or *Indra*, and attain to union, and to the same spheres, with those gods respectively. And in the same way the *Taittirīya Brāhmaṇa* states that the possessors of particular kinds of knowledge attain to union with *Āditya* (the Sun), and to union, and to the same spheres, with *Agni*,

¹ Weber does not give any reference here.

² x. 3, 3, 8 "Whoever departs from this world knowing this, goes with his voice to fire (*Agni*), with his eye to the sun (*Āditya*, compare R.V. x. 16, 3 quoted above), with his mind (*manas*) to the moon, with his ear to the regions, with his breath (*prāṇa*) to the wind (*Vāyu*; compare R.V. x. 16, 3). Having attained such a nature and become any one of these deities that he desires, he rests."

³ i. 9, 3, 10 "The rays of him who shines (the sun) are the pious. The light which is above is *Prajāpati*, or the heavenly world."

⁴ vi. 5, 4, 8 "These (the stars) are the lights of the practisers of holy acts who go to heaven." It is not clear whether this means that the lights belong to, or that they are, the practisers of holy acts. The passage of the *Indralokāgama* (Mbh. iii. 1745 ff.) referred to by Prof. Weber is as follows: "The sun shines not there (in *Indra's* heaven), nor the moon, nor fire. There the righteous shine by their own light, acquired by their own virtue. Arjuna beheld there, shining in their own spheres, luminous and beautiful, those bright forms of the stars which, when seen from the earth, appear from distance to be as small as lamps, although they are very vast." These, as Arjuna's conductor explained to him, were the righteous occupying their own spheres, whom when on earth he had seen in the sky in the form of stars."

with Vāyu, with Indra, with Brhaspati, with Prajāpati, and with Brahma, or Brahmanā (I know not which is intended). In the same work, iii. 9, 11, mention is made of a certain sage who through his knowledge became a golden swan, went to heaven and attained to union with the sun. In A. V. xix. 71, 1, a Brahma-loka is mentioned. [For the Puranic idea of the world of Brahma, see Wilson's Vishnu Purana, 4to. ed., p. 48, note 3, and p. 213, note 3 (or for the first of these passages, Prof. Hall's 8vo. ed., vol. i. p. 98).]

In the Ś. P. Br. xi. 5, 6, 9, it is declared that a man who reads the Vedas in a particular manner is "freed from dying again, and attains to a sameness of nature with Brahma (*Brahmanah sātmatām*). Even if he cannot read with much power, let him read one sentence relating to the gods."

The following curious passage is from the Aitareya Brāhmaṇa, iii. 44: "The Sun neither ever sets or rises. When people think he sets by day, he (only) turns himself round after reaching the end of that (portion of time), and makes night below and day above. Then when people think he rises out of night, he (only) turns himself round after reaching the end of that (portion of time), and makes day below and night above. In truth he never sets. The man who knows this, that the sun never sets, enjoys union and sameness of nature with him, and abides in the same sphere."¹

In another passage (ii. 17) the same work declares how far heaven is from earth: "He who desires heaven should repeat a thousand (verses). For the heavenly world is distant from hence a thousand days' journey on horseback."

In the Śatapatha Brāhmaṇa, vi. 6, 2, 4, it is said that the door of heaven (*svarga-loka*) is situated in the north-eastern regions, while that by which the heaven of the Pitris is entered, lies to the south-east (*ibid.*, xiii. 8, 1, 5).²

In the legend on future retribution quoted by Weber, as above stated, from the same Brāhmaṇa (xi. 6, 1, 1 ff.) it is

¹ See Dr. Haug's Aitareya Brāhmaṇa, ii. p. 242. I differ from that scholar in translating *parastāt* "above," and not "on the other side."

² See Weber, in the Journal of the German Oriental Society, ix. 243, 308.

related that Bhṛgu, the son of Varuṇa, visited, by his father's command, the four points of the compass, where he saw men being cut into pieces and eaten by other men, who when questioned by Bhṛgu, declared that they were revenging on their victims the treatment which they had received at their hands in the other world (on earth). These victims are allegorically explained in the Brāhmaṇas as representing the trees, animals, plants, and waters employed in sacrifice. But Prof. Weber is of opinion that the story is an old popular legend regarding the penal retribution executed by the former sufferers themselves on those who had oppressed them while on earth, and that the narrative had been appropriated by the priests and introduced into the Brāhmaṇas to relieve the monotony of its tedious disquisitions, and explained in the manner I have stated.

I return to Professor Weber's discussion on the doctrine of the Brāhmaṇas regarding a future state.

"The Brāhmaṇas, however," he continues, "are not explicit in regard to the duration of these rewards and punishments; and it is here that we have to seek the origin of the doctrine of transmigration. To men of the mild disposition and reflective spirit of the Indians, it would not appear that reward and punishment could be eternal. They would conceive that it must be possible by atonement and purification to become absolved from the punishment of the sins committed in this short life. And in the same way they could not imagine that the reward of virtues practised during the same brief period could continue for ever. The dogma of transmigration agreed with both of these suppositions, though in another respect it was most unsatisfactory; for where was either a beginning or an end to be sought? The spirit of enquiry sought to escape from this dilemma by systematic refinements (*sonderung*), but only became more hopelessly entangled: and at length it was only extricated by cutting the knot, by succumbing to the influence of the aspiration after complete redemption from the bondage of the world, and of individual existence; so that that destiny, which was in earlier times regarded as the greatest punishment, was now

recognized as the highest reward. This mode of cutting the knot is the work of Buddha and Buddhism: and the best proof that the fundamental substance of the Brāhmaṇas is pre-Buddhistic is (apart from all other evidence) to be found in this, that they do not recognize the existence of the dilemma in question, that they know nothing of the contempt of life to which we have alluded, but rather express with directness and naïvety a fresh and genuine love of existence, and a yearning after immortality. It is only some passages of the Bṛhadāraṇyaka and of the Chhândogya Upanishad, which form an exception to this assertion; and on that account they must be held evidently to belong to the period immediately preceding Buddha's appearance, or even to that which followed it."

It does not quite agree with the conclusion here announced that the passage I have quoted above from Śatapatha Brāhmaṇa, xi. 5, 6, 9, appears to speak of union with Brahma;—unless this is to be understood in some other sense than the later one of absorption into his essence.

Though Indra, Varuṇa, and other gods are represented in the Mahābhārata and Purāṇas as leading a sensual and immoral life,¹ and though the Apsarases, or celestial nymphs, are expressly declared to be courtezans,² form the subject of most voluptuous descriptions,³ and are represented as being sent by the gods from time to time to seduce austere sages into unchastity, and are promised, as we have already seen, as the companions of warriors in a future life,—yet the pictures drawn of paradise in those works are not always of such a gross character. In the account of heaven contained in the Mahābhārata, iii. 15441 ff., there is no promise of any sensual gratification held out. It appears (vv. 15407 ff.) that a sage named Mudgala had lived a life of poverty, piety, and self-restraint, practising hospitality according to his humble means, with the grain which he gleaned, and which (like the widow of Zarephath's oil) never underwent diminution. At

¹ See my Sanskrit Texts, vol. iv. p. 41.

² Ibid., p. 394; and Rāmāyana, i. 45, 36 (ed. Schlegel), and i. 46, 2 (Gorresio).

³ See Mahābhārata, iii. 1821 ff.; Rāmāyana, Uttara Kāṇḍa, xxvi. 16 ff. (Bombay ed.).

length another holy man, called Durvâsas, famous in Indian tradition for his irascible temper, came to prove Mudgala's powers of endurance; and six times devoured all the food which the hospitable saint possessed. Finding that the temper of his host was altogether unaffected by these trials, Durvâsas expressed the highest admiration of his virtue and declared that he would go bodily to heaven. As he spoke these words a messenger of the gods arrived in a celestial car, and called upon Mudgala to ascend to a state of complete perfection. The sage, however, desired first to learn the advantages and drawbacks of the heavenly state, and the messenger proceeded to tell him (vv. 15441 ff.) first what kind of people go there, viz., those who have performed austerities or celebrated great sacrifices, the truthful, the orthodox, the righteous, the self-restrained, the meek, the liberal, the brave, etc. These celestial abodes were, he said, shining, glorious, and filled with all delights. There is seen the vast golden mountain Meru, and the holy garden Nandana, etc., where the righteous disport. There hunger, thirst, weariness, cold, heat, fear, are unknown; there is nothing disgusting, or disagreeable; the scents are delightful; the sounds are pleasant to the ear and mind: there is no sorrow, nor lamentation, nor decay, nor labour, nor envy, nor jealousy, nor delusion. There the blessed are clothed with glorious bodies, which are produced by their works, and not by any father or mother. Their garlands are fragrant and unfading; they ride in aerial cars. Beyond these regions there are, however, others of a higher character—those to which the *rshis* who have been purified by their works proceed. Still further on are those where the *Rbhus* dwell; and where there is no annoyance *occasioned by women* (*stri-kṛtas tāpaḥ*), or by envy arising from the sight of worldly grandeur. The blessed there do not subsist on oblations, nor do they feed upon ambrosia; they have celestial, and not coarse material bodies. These eternal gods of gods do not desire pleasure; they do not change with the revolutions of Kalpas (great mundane ages). How can they then be subject either to decay or death? They experience neither joy, nor pleasure, nor delight, neither happiness nor suffering.

neither love nor hatred. That highest state, so difficult to attain, and *which is beyond the reach of those who seek after pleasure*, is desired even by the gods. This celestial felicity, the messenger says, is now within Mudgala's reach,—the fruit of his good deeds. The speaker next, according to his promise, explains to the sage the drawbacks of the heavenly state. As the fruit of works done on earth is enjoyed in heaven, whilst no other new works are performed there from which new rewards could spring, this enjoyment is cut off from its root, and must therefore come to an end. For this world is the place for works, while the other is the place for enjoyment. This loss of gratifications to which the heart has become devoted, and the dissatisfaction and pain which arise in the minds of those who have sunk to a lower estate, from beholding the more brilliant prosperity of others, is intolerable. To this must be added the consciousness, and the bewilderment, of those who so descend, and the fear of falling which they experience when their garlands begin to fade. Such are the defects which attach to all existence till it is absorbed in Brahma. But the state of those who have fallen from heaven is not altogether without compensation. As a result of their previous good deeds they are born in a condition of happiness; though if they are not vigilant, they sink still lower. Having given this explanation, the messenger of the gods invites Mudgala to accompany him to paradise. The saint, however, after consideration, replies that he can have nothing to do with a state of happiness which is vitiated by so great defects, and the termination of which is followed by so great misery. He has therefore no desire for heaven; and seeks only that eternal abode where there is no sorrow, nor distress, nor change. He then asks the celestial messenger what other sphere there is which is free from all defects. The messenger replies that above the abode of Brahmā is the pure eternal light, the highest sphere of Vishnu, who is regarded as the supreme Brahma. Thither none can proceed who are devoted to objects of sense, or who are the slaves of dishonesty, avarice, anger, delusion, or malice; but only the unselfish, the humble, those who are indifferent to pain and

pleasure, those whose senses are under restraint, and those who practise contemplation and fix their minds on the Deity. The sage then dismissed the messenger of the gods, began to practise ascetic virtues, becoming indifferent to praise and blame, regarding clods, stones, and gold as alike. Pure knowledge led to fixed contemplation; and that again imparted strength and complete comprehension, whereby he attained supreme eternal perfection, in the nature of quietude (*nirvāṇa*).¹

The difference between the results of meritorious works, and of knowledge, so familiar to the religious philosophy of the Hindus, is clearly set forth in the following verses of the *Mahābhārata*, xii. 8810 ff.: "By works a creature is bound; by knowledge he is liberated; wherefore devotees gifted with perfect insight perform no works. Through works a creature is born again after death, with a body (of one or other) of sixteen descriptions; by knowledge he becomes the Eternal, Imperceptible, and Undecaying. Some men of little understanding eulogise works; and so embrace with delight the entanglements of corporeal existence. But those who have reached the highest intelligence, and a perfect comprehension of righteousness, do not commend works, as a person drinking from a river thinks little of a well. The results which a man obtains from works are pleasure and pain, prosperity and adversity; by knowledge he gains that condition in which his griefs are at an end, in which he dies not, in which his birth is not repeated, from which he does not return; in which that supreme Brahma exists imperceptible, unchanging, etc. etc."

¹ See the other passages quoted, *s.v.*, by Böhtlingk and Roth, from Brāhmanical writings where this word is used. Its employment by Buddhists to express the highest destiny of mundane creatures is well known.

ART. XII.—*On the Jyotisha Observation of the Place of the Colures, and the Date derivable from it.* By WILLIAM D. WHITNEY, Esq., Professor of Sanskrit in Yale College, New Haven, U.S. Communicated by F. HALL, Esq.

[Read July 4, 1864.]

COLEBROOKE, in his celebrated essay "On the Vedas, or Sacred Writings of the Hindus" (As. Researches, vol. viii.; Misc. Essays, vol. i.), was the first to direct general attention to the now familiarly known passage of the Jyotisha relative to the position of the solstices in the Hindu lunar zodiac, and to derive from it a date for use in determining the doubtful chronology of the earliest period of literary productiveness in India. His conclusion is expressed as follows: "Hence it is clear, that Dhanishṭhā and Āśleṣhā are the constellations meant; and that, when this Hindu calendar was regulated, the solstitial points were reckoned to be at the beginning of the one, and in the middle of the other: and such was the situation of those cardinal points in the fourteenth century before the Christian era" (Misc. Essays, vol. i., pp. 109-110). He had a little before (ibid., p. 106) declared that he "inclined to think, that the ceremonies called *yajña*, and the prayers to be recited at those ceremonies [namely, the prayers constituting the *sanhitas* of the three older Vedas], are as old as the calendar."

Hardly any datum has been so often referred to, and so much relied on, as this, by those engaged in the investigation of Indian antiquity. It has been in nearly the same degree the sheet-anchor of the prevailing chronology of the Vedic period, as the identification of Sandrocottus and Chandragupta has been of that of the middle ages of Indian history. Within a few years, however, more than one voice has been raised to deny the accuracy of Colebrooke's calculation, and to impugn the validity of the chronological conclusion which he derived

from it. The eminent mathematician, Archdeacon Pratt of Calcutta, in a little paper published in the *Journal of the Asiatic Society of Bengal* for 1862 (vol. xxi., pp. 49 seq.), has shown that the assigned position of the solstices indicates rather the twelfth than the fourteenth century B.C. as the time when the observation was made (the particular year, as determined by him, is 1181 B.C.). Prof. Max Müller, in his Preface to the fourth volume of his *Rig Veda* (London, 1862), adopts this rectified date, and then proceeds to point out the impossibility of so attaching the observation in question to any era or period in Hindu literary history as to make it chronologically available; also urging that the difficulty of the observation, and the unskilfulness of the Hindus as observers, compel us to leave a margin of several centuries on either side, in settling the time of the observation itself. To these conclusions, of Archdeacon Pratt and of Prof. Müller, my own assent has already been publicly expressed (see *Journ. of the Am. Oriental Society*, vol. viii., pp. 83, 84). In now recurring to the subject, I do not wish to retract or modify that assent, but to explain more fully the grounds on which it is based, treating of one or two points of interest, connected with the subject, which have hitherto been either not at all, or only imperfectly, elucidated.¹

In the first place, I would say a few words in criticism of Archdeacon Pratt's calculation. He founds his conclusion, as concerns the fundamental point of the limits of the asterisms, upon the position, as observed by the Hindus and recorded in the modern astronomical text-books, of a single one of the junction-stars of the asterisms, namely, the brilliant α Leonis, or Regulus. That is to say, he determines the final point of Āśleshā, which is also the initial point of Maghā,

¹ There is the more reason for arguing the case anew, as, in a criticism of Dr Haug's *Aitareya Brāhmaṇam* (in the *Saturday Review* for March 19, 1864) which is understood to come from the pen of Prof. Müller, this scholar seems inclined to abandon in part his former opinions, in deference to the authority of the writer whom he is criticizing, he says "he is right also when he assigns the twelfth century as the earliest date for the origin of that simple astronomical system on which the calendar of the Vedic festivals is founded." The "margin of several centuries" here disappears, and the date of the observation becomes ascertainable with exactness.

solely from the statement made by the later Hindu astronomers, that Regulus is situated nine degrees upon the ecliptic east of the point in question. This star was selected by him, undoubtedly, because it is a bright one, situated close to the ecliptic (according to the Hindus, upon it), and in the next asterism to that in which is the place of the summer solstice, as laid down in the Jyotisha. But the defined positions of all the junction-stars of the asterisms are affected with serious errors and incongruencies, as compared with one another and with the assigned initial point of the sphere. The extreme errors are, two and a half degrees in the one direction, and three degrees in the other; the difference between them is five and a half degrees, which represents a difference of nearly five hundred years in the value of the precession as deduced, according to the method followed by Archdeacon Pratt, from the two junction-stars exhibiting the errors referred to.¹ In fact, had this gentleman founded his calculation upon the defined position of the junction-star of Pushya (the asterism lying next west, as Maghâ, with its junction-star Regulus, lies next east, of Âshleshâ), or of that of Chitrâ (as located by the Sûrya-Siddhânta), or of more than one other which might be chosen among the asterisms, he would have reached a result confirming, instead of overthrowing, Colebrooke's date. It was clearly, then, as I think, a mistake on his part to take Regulus alone into account, in performing his process intended for the testing and correcting of his predecessor's conclusions. If, indeed, Regulus could be shown to have been the star whose observation lay at the foundation of the Hindu system of asterismal division of the ecliptic, and by reference to which were determined the limits of the arcs constituting the "portions" of the asterisms, and the places of the other junction-stars, it would be fully entitled to be so distinguished by him; but it is unnecessary to say that such is not the case: there is no plausible ground for conjecturing, even, that this star was

¹ Namely, those of Viśākhâ and Chitrâ. For the amount and direction of the errors of position of all the junction-stars, see the table in our notes on the Sûrya-Siddhânta, in the Journ. Am. Oriental Society, vol. vi., p. 355 (p. 211 of the separate impression).

an especially prominent mark for the attention of the early Hindu astronomers. In our present ignorance as to the details of the process by which the observations upon the junction-stars were made, and their results reduced to the form in which they are presented to us by the *Siddhāntas*, there are but two courses which we can safely follow: 1st, we may regard the assigned initial point of the system of division, the star ζ Piscium, as the actual starting-point of observation, and the varying errors of position of the other junction-stars as mere errors of observation committed with reference to that point,—in other words, accepting the limits of the asterismal portions as theoretically laid down in the Hindu text-books, and looking upon the places of the junction-stars in their respective portions as determined by the Hindus with what accuracy they were able to command;—or, 2nd, to average the errors of all the stars, and to modify by the result thus obtained the defined position of the initial point of division. Of these two, I should decidedly incline to prefer the former course. Following it, we find the difference between the solstice or the equinox of the *Jyotisha* and that of the modern astronomical system, which is the equinox of A.D. 560 ($10'$ east of ζ Piscium), to be one asterism and three quarters, or ($13^{\circ} 20' \times 1\frac{3}{4}$) $23^{\circ} 20'$; and this, at one degree of precession in seventy-two years,¹ gives an interval of ($23\frac{1}{3} \times 72$) 1680 years, whence we should derive the date 1120 B.C. ($1680 - 560 = 1120$) as that of the observation recorded in the *Jyotisha*. If, on the other hand, we allow for the average of the Hindu errors of position (which, as is shown in the note on the table to which reference has already been made, is $-56'$), the result will be changed by sixty-seven years, and the date arrived at will be 1187 B.C. This last differs by but an insignificant amount from the date obtained by Archdeacon Pratt (1181 B.C.), nor does the other vary very materially from it; but this near accordance we must attribute to the

¹ This is the rate adopted by Archdeacon Pratt in his calculation, and it is quite sufficiently exact. The Rev. R. Main, in a note to Muller's Preface (p. lxxxiv), already referred to, substitutes a more precise valuation, and makes a difference of five years in the result, a totally insignificant correction in a calculation of this character.

good luck, rather than to the sound method, of the calculator : he chanced to select one of the junction-stars whose error of defined position ($-49'$) was small, and, moreover, very nearly coincided with the average error of the whole series.

Our next inquiry is : if the true date thus derivable from the Jyotisha is the twelfth century B.C.—its early part, according to one mode of reckoning ; its later part, according to that to which the preference has been given above—how should so sound and careful an investigator as Colebrooke have come to pronounce it the fourteenth century ? Archdeacon Pratt conjectures that he may have “taken the constellations loosely ;” that is, as he explains himself, that Colebrooke may have based his calculations, in some way, not on the asterismal “portions,” as equally divided, but upon the asterismal star-groups ; taking the “beginning of Dhanishthâ” to be the first star in the asterism Dhanishthâ, not the first degree of the arc of $13^{\circ} 20'$ called Dhanishthâ, and the middle of Âshleshâ to be, not the centre of the arc of that name, but the middle of the little group in the head of Hydra, which, being called Âshleshâ, gave its name to the adjacent portion of the ecliptic. But he abandons the conjecture, as affording no sufficient explanation : and very properly, in my opinion, since I cannot think it possible that Colebrooke should have founded his calculation upon such an understanding of the language of the Jyotisha. Müller, on the other hand (Preface, p. xxvi.), appears to suppose that Colebrooke’s statement is but an echo of that made by Wilford, on the authority of Davis, in the fifth volume of the *Asiatic Researches* (p. 288), to the effect that the date intended was 1391 B.C.¹ I cannot, however, think it likely that Colebrooke would thus have rested on a published opinion of another investigator without at least referring to it ; nor, indeed, that he would have decided so

¹ Wilford’s statement is put forth in correction of that of Sir William Jones, who had fixed the date at 1181 B.C. This seems a remarkable concordance with Archdeacon Pratt’s result ; but, in fact, the coincidence is only fortuitous : the real agreement of Jones’s process is with my own. The amount of precessional movement, $23^{\circ} 20'$, and the derived interval of time, 1680 years, are the same in his calculation and in mine : but he reckons the interval back from an assumed period of Varâha-mihira, A.D. 499, and I, from the time when the equinox was actually $10'$ east of ζ Piscium, or A.D. 566.

capital a point without independent investigation: above all, when two scholars, of the rank and consideration of Jones and Davis, had arrived at conclusions respecting it which differed by more than two centuries. It is vastly more probable that Colebrooke shared Davis's error, whatever it may have been; that he either knew and approved the latter's calculation, or had of himself arrived, from like premisses and by a like course of mathematical reasoning, at the same result. No other scholars of that period have rendered to the study of Hindu astronomy services which can bear any comparison with those of Davis and Colebrooke; and an error in which they both agree ought to admit of an explanation which shall prove it to be no blunder, but only a deduction from a different, and an admissible, interpretation of the data furnished us from Indian antiquity.

The only practicable method, so far as I can see, of arriving at the date given by Colebrooke and Davis, is to reckon the difference of precession between the Jyotisha and the modern astronomical system as two full asterisms, or $26^{\circ} 40'$. This, at 1° in seventy-two years, would give an interval of 1920 years, and would carry the Jyotisha observation back to beyond the middle of the fourteenth century B.C. ($1920 - 560 = 1360$ B.C.).¹ This would be the true date for that arrangement of the asterisms in which Kṛttikā stands at their head—if only we suppose that the limits of the asterismal divisions were then precisely the same as they are determined to be in the later system of the Siddhāntas, with Āśvini at the head. In the Jyotisha, as in all the other documents of the more ancient Hindu astronomy, Kṛttikā is treated as first asterism; that is to say—so all are agreed in understanding it—as containing the vernal equinox. But the position of the solstices given in the Jyotisha implies, if taken exactly, an equinox no longer situated in Kṛttikā, but fallen back even from its western limit, through the eastern quarter of Bharāṇi; thus

¹ Davis's date, 1391 B.C., differs from this only to an insignificant amount, which may possibly be explained by supposing that he reckoned the precession at 1° in seventy-three years: its rate is, indeed, a little slower than 1° in seventy-two years, although the latter value is a good deal more nearly correct than the former.

giving to the latter the quality of equinoctial asterism, and the title to headship of the series. It might well enough, then, appear to Colebrooke that this seeming inconsistency of the Jyotisha with itself could be best solved by still regarding Kṛttikā as equinoctial asterism, and supposing that the Jyotisha was only talking loosely in fixing the solstices at the beginning of Dhanishṭhā and the middle of Āśleshā, instead of at the end of the first quarter of Dhanishṭhā and the third quarter of Āśleshā. And, in my view, as I shall presently explain, he was fully justified in making this assumption. That he thus departed from the precise letter of the Jyotisha, and in a manner which ought properly to have been pointed out and accounted for by him, is very true; and it is greatly to be regretted that he did not enter into some brief explanation of his process of calculation. But he must be fully acquitted of the charge of having committed any real misrepresentation of his authority, by the date which he gave.

It is, of course, theoretically supposable that the Hindus should have had an exact determination of the stellar place of the vernal equinox in the fourteenth century before Christ, and should have fixed by it the western limit of the asterismal portion Kṛttikā; and that, some two centuries and a half later, they should have observed that it had fallen back through a quarter of the preceding asterism, and have recorded this observation in the Jyotisha. But no such supposition will possess the least plausibility to the mind of any one who is conversant with Hindu antiquity. The ancient astronomy of India was, evidently, of a very rude character. It had neither the instruments nor the theoretical system of division of the circle necessarily implied by exact measurements. It knew no lesser parts of the ecliptic than the twenty-sevenths, or "portions" of the asterisms. Its observations were only such as could be made with the unassisted eye, and were almost wholly limited to the moon, in her relations to the star-groups constituting the asterismal system. The lesser planets were altogether ignored. The ancient Hindus had devised no practical method of so reconciling solar and lunar time as to establish a year capable of continuous chronological use. The Jyotisha,

by its cycle of five years and its mode of intercalation, assumes a year of 366 days: an inaccuracy which, after but two or three repetitions of the cycle, would have thrown their whole lunar reckoning into utter confusion. He who should expect anything approaching to an exact solution of so difficult a problem as the determination of the stellar place of the equinox from such a science, and from a people never capable of exact observation, even when they had learned scientific astronomy from the Greeks—unable, five centuries after Christ, to find the ecliptic distance from ζ Piscium of visible fixed stars in the nearest constellations of Aries, Taurus, and Orion, without errors ranging from fifty minutes up to nearly three degrees—he who should expect this, I say, would be guilty of something nearly approaching a palpable absurdity. If the Hindus themselves, in the ancient period, made an observation on the place of the colures which would have been an accurate one in the year 1360 B.C., no one should venture to draw from it any more precise conclusion than that it was probably made somewhere between 1800 and 1000 B.C. That they had any idea of the precession; that they were, or even believed themselves to be, able to notice when the colures had changed their places westward by three and a third degrees, or a quarter of an asterism, I do not in the least believe. If, then, the author of the *Jyotisha* impliedly puts the vernal equinox at the end of the third quarter of Bharani, I have no idea that he meant to reject the actual reckoning, which implied its presence at the beginning of Kṛttikā. If he had begun his year and his cycle with the vernal equinox, instead of the hibernal solstice, he would have put the equinoctial colure at the beginning of Kṛttikā and the middle of Viśākhā. His apparent shifting of its position has no deeper ground than this: that he did not care to talk in so exact terms as quarters of an asterism, and preferred to start from the beginning of an asterism, rather than from somewhere in its interior.¹ Colebrooke and Davis, therefore, if less faithful to the letter of the *Jyotisha* than Archdeacon Pratt, are equally true to its real meaning.

¹ Weber, in his *Jyotisha* (*Transactions of the Berlin Academy for 1862*, p. 28), if I rightly apprehend his meaning, also inclines to this view.

A further element of doubt, however, requires to be taken into account, if we would fully appreciate the difficulties which lie in the way of our extracting a definite date from the passage of the Jyotisha now under consideration. In the later astronomical science of India, which has borrowed from abroad complete and elaborate modes of dividing the circle, of calculating the places of the planets, and so on, and which has made a real scientific determination, though an inexact one, of the places of the junction-stars of the asterismal groups, there is a precise theoretic division of the ecliptic into twenty-seven equal arcs, of thirteen and a third degrees ($13^{\circ} 20'$) each, as "portions" of the twenty-seven asterisms. The starting-point is at, or close upon, ζ Piscium; and we know exactly how many degrees and minutes from that star lie the eastern and western limits of any given asterismal portion; as, also, by how many degrees and minutes the limits of each portion are distant from its own junction-star. It is true that the Hindu science does not recognize the necessity, or the propriety, of habitual reference to these limits in observation: they are there only for the benefit of the theoretic calculator; and the most practised Hindu astronomer, at any period, would doubtless have made lame work of pointing out their position with accuracy, or determining by observation the place of a planet with reference to them; yet they are a recognized part of the system. Now, in all our reasonings hitherto, we have assumed that the limits thus laid down by the modern science were also known to and adopted by the ancient. It was necessary to do so, if we were to find any ground on which to construct an exact astronomical calculation. But it is time to point out the total fallacy of the assumption. We have no reason whatever to believe that, when Kṛttikā headed the series of asterisms, the junction-star of Revatī, ζ Piscium (even supposing the same star to have filled that office then as later, which there is room to doubt),¹ was the point of departure of the whole system of ecliptic division. We have no reason to believe that there was any system of division at all, founded on accurate measurements, and starting from a single definite

¹ See *Journal Am. Or. Soc.*, vol. viii., pp. 44-5.

point. The portion Kṛttikā was not an arc of the ecliptic whose western and eastern boundaries were so many degrees and minutes distant from some fixed star, but simply that part of the moon's path which lay adjacent to the asterism or constellation Kṛttikā (the Pleiades); the portion Āśleshā was that on which bordered the constellation Āśleshā (head of Hydra); and so on. To transfer to the ancient period the precise theoretic divisions of the later science, and to hold that, a thousand years before Christ, the phrases, "beginning of Kṛttikā," "middle of Āśleshā," "end of third quarter of Bharanī," and the like, designated the same points on the ecliptic as they do when employed by Brahmagupta and the author of the Sūrya-Siddhānta, is to commit a palpable and very serious anachronism. It was not practicable, in selecting a series of star-groups to mark a twenty-seven-fold or twenty-eight-fold division of the ecliptic, always to pitch upon such as had a like position in the theoretic limits of the several portions which each was to occupy and name. If any one will take the trouble to mark off, upon a globe or chart,¹ regions of the zodiac, each having $13^{\circ} 20'$ of breadth, he will find that only in a small majority of the cases (sixteen out of twenty-seven) does the Hindu asterism lie fairly within the boundaries of the portion which in the modern system it designates: in the remaining cases, it either overlaps the boundary, or is wholly embraced within the limits of the next portion. There is nothing surprising in this, because the moon does not, like the sun, move through the zodiac upon a single track, and always at the same rate in the same part of the heavens; the region of her accelerated or retarded motion, and of her removal southward or northward from the ecliptic, shifts so rapidly, that no series of stars or star-groups, however carefully selected, could continuously mark her progress with any degree of exactness. All that the founders of the system could seek to accomplish was this: to choose the proper number of groups, sufficiently conspicuous to be easily recognized and remembered, situated not too far from the

¹ For instance, upon the comparative asterismal chart given in the additional notes to our translation of the Sūrya-Siddhānta (Journ. Am. Or. Soc., vol. vi.)

ecliptic, and as nearly equally distributed as was practicable; all means of accurately testing the degree to which this last desirable requisite was complied with being wanting. No scheme of asterismal limits, then, depending on and determined by a single fixed point, is necessarily or even plausibly to be assumed as forming a part of the ancient asterismal system. And, especially, no such scheme determined by the star ζ Piscium. That star had no prominent importance in the eyes of the Hindu astronomers, so far as we know, until its near coincidence with the equinox of the period of reconstruction of the Hindu astronomy, five centuries after Christ, occasioned its selection as the cardinal point in the movements of the planetary system. Moreover, if it be made the determinant of division, all the series of seven asterisms, from Śatabhishaj to Kṛttikā, inclusive, are found to be situated¹ upon the extreme eastern limits of the portions which belong to them respectively. It would be a strange method, surely, to commence from the Kṛttikās (Pleiades) a series of asterismal divisions, made by the eye alone, which should leave the portion marked by that group, and named from its lying entirely behind it, to the westward.

The conclusion to which we seem necessarily led by the arguments and considerations here presented may be summed up as follows:—First, it is impossible for us to determine, more nearly than within a few degrees, what point upon the ecliptic is meant by any designation of its place with reference to the asterisms which is given us by Hindu authorities of older date than the establishment of the modern astronomical system; second, we have no reason for ascribing to the ancient Hindus any pretence to such exact knowledge or any attempt at such precision of statement, as should give real significance to an implied difference of a quarter of an asterism in the location of the colures by two different authorities; third, even if we chose to attribute intended precision to the statement of the Jyotisha, the difficulty of the observation, and the weakness of the Hindus as practical astrono-

¹ That is to say, in longitude; which is evidently, upon the whole, the fairest method of regarding their position as estimated by the unaided eye.

mers, would forbid us to suppose that they can have made other than a rude approximation to the true place of the solstices: and hence, finally, it is utterly in vain for us to attempt to assign a definite date to the observation here in question; a period of a thousand years is rather too little than too great to allow for all the enumerated sources of doubt and error. He who declares in favour of any one of the centuries between the eighth and the eighteenth before Christ, as the probable epoch of the Jyotisha observation, does so at his peril, and must be prepared to support his opinion by more pertinent arguments than have yet been brought forward in defence of such a claim.

The possibility that the observation which we have been discussing may require to be yet more totally divorced from connexion with any assignable period in Hindu literary history, as having been made elsewhere than in India itself, is worth a passing reference, although it does not require to be urged. Some recent authors have shown an unnecessary degree of sensitiveness to any suggestion of the importation of astronomical knowledge into India in early times. Such importation, of course, is not to be credited as a fact without satisfactory evidence; but it is also not to be rejected as a possibility upon insufficient *a priori* grounds. To Müller's erroneous assumption (Preface, p. xxxviii.), that "none of the sacrifices enjoined in the Brāhmaṇas could be conceived" without "the division of the heavens into twenty-seven sections," I have referred elsewhere (Journ. Am. Or. Soc., vol. viii., p. 74), claiming that, on the contrary, the concern of the *nakshatras* with these sacrifices is for the most part a matter of nomenclature merely. It is true, for instance, that one cannot obey an injunction to perform a certain sacrifice "on the first of Chaitra" without a system of asterisms: but the reason why such a sacrifice had been enjoined was not that the moon was to be full fifteen days later in the neighbourhood of Spica Virginis, rather than of some other star; the ceremony was established for a certain new moon of spring, to which the star only gives a name: it may, for aught we know, have been religiously observed long before the month

got its present title. The asterism *Chitrâ* does not furnish the occasion of the sacrifice, immediately or mediate; it simply denominates the natural period at the beginning of which the sacrifice is to be performed. And so in other like cases. It is not, indeed, to be denied that the *nakshatras* have acquired a certain influence and importance of their own, as regards the seasons of sacrifice: their propitious or unpropitious character must be had in view in regulating some of its details; but all this, like the astrological influence of the signs of the zodiac, is only the natural secondary outgrowth of an institution originally intended for other purposes. To claim to settle the vexed and difficult question of the ultimate origin of the asterismal system, possessed in common by the Hindus, the Chinese, and the Arabs, by the simple consideration of its importance to the Hindu ceremonial, is wholly futile. Biot, by similar reasoning, arrives at the confident conclusion that the system must be indigenous to China: he finds it too thoroughly interwoven with the sacred and political institutions of that country to be able to conceive of its ever having been introduced from abroad. And special students of Arab antiquity, upon the same grounds, advance the same claim in behalf of Arabia. It is in each case prepossession which gives to this class of considerations a controlling importance: the question of origin, if it ever finds its satisfactory settlement, must be settled by arguments of another and more legitimate character.

But the learned and ingenious editor of the *Aitareya Brâhmana*, Dr. Haug of Pûna, the latest author who has made the Jyotisha observation a cardinal element in his system of chronology for the Vedic period, commits the yet more serious error of maintaining that such an observation was an essential prerequisite to the formation of a calendar for the regulation of the Brahmanic sacrifices.¹ It is plain that he both exaggerates the regularity of the ancient Hindu calendar, and misapprehends the relation to it of a determination of the solstice's stellar position. If the sun shone

¹ See the *Aitareya Brâhmanam*, etc., by Martin Haug. Bombay: 1863. Vol. I., Introduction, pp. 43 sq.

with as mild a radiance as the moon, so that one could see from what points among the stars he turns back towards the equator, at the end of his northern and southern progresses, by simply going out and looking at the heavens, his presence at the solstice, as thus determined, might constitute a natural and facile definition of the beginning of the year. But to fix the place of an equinox or solstice in the starry heavens is far from being a matter of direct observation; it is a deduction, and one of no small complication and difficulty to a people unversed in astronomy and poorly provided with instruments, from observations of another character. To find the *time* of the solstice or equinox, by such means as the shadow of the gnomon, or as noticing the points on the horizon where the sun rises and sets, is the necessary first step; and it is of itself sufficient to regulate the calendar, without the least reference to what star, or what asterism, might be nearest the sun at the time; the latter is a point rather of curious scientific interest than of practical chronological consequence. We are as yet without satisfactory evidence that the ancient Hindus had worked out any method of reconciliation of solar and lunar time possessing sufficient accuracy to admit of continuous practical use. The Jyotisha, certainly, does not furnish such a one; nor do we know whether even its cycle is more than an individual and isolated attempt, never ratified by general adoption and application, to solve the problem with which it deals. The Hindus can hardly be claimed to have had a calendar until the epoch of their modern astronomy. They kept a correct lunar reckoning, by simple observation of the lunations, naming each from the asterism in or near which the moon was full during its continuance; they kept a rude solar reckoning, by observations of the seasons, of the longest and shortest days, and the like; but they did not perplex themselves by over-attachment to coarse and imperfect modes of establishing the relations of the two reckonings. They could fix accurately the lunar date of any event or ceremony; they could correctly determine an interval of years; without needing to know exactly how long each year was, on what

day it began, and whether it was of twelve or of thirteen months. The *sattras*, or great sacrifices lasting through a whole year, and divided into two corresponding halves, representing the northern and southern progresses (*ayana*) of the sun, to which Dr. Haug appeals as proving accurate astronomical observation among the Hindus of the period of the Brâhmanas, and even as implying a determination of the place of the solstice like that recorded in the Jyotisha, appear to me to prove rather the contrary of the former, and to have nothing whatever to do with the latter. So careless were the Hindus of anything like close accordance between the halves of their *sattras* and the sun's progresses, that they made the regular moon of the *sattra*-year to be 360 days, and admitted its variation to years of 324, 351, 354, and 378 days; the time of the beginning of the great festival was not a fixed and determinate one; in fact, none of the directions given respecting it in the Brâhmanas and Sûtras in the least imply a scrupulous and scientific regard to astronomical considerations.¹ And it is perfectly evident that the priests might have adapted their sacrifices with any degree of exactness to the movements of the sun, while utterly regardless of his position in the lunar zodiac. If, by a skilful deduction from data actually within their reach, they had determined with some tolerable degree of accuracy the situation of the solstitial point in the ecliptic, it would have been of no service to them in regulating their calendar, because they could not ascertain when the sun occupied that point directly, but only through the medium of observations which would have given them the regulation they sought immediately, without reference to the sun's place among the asterisms. The Hindus, indeed, for aught that we know or have reason to believe to the contrary, continued to recognize the solstice as at the place mentioned in the Jyotisha, down to the epoch of the modern astronomy; and no one will pretend that the Jyotisha is not later by many centuries than the true epoch of the observation it contains.

¹ See the details in the second of Weber's valuable articles on the *nakshatras*, in the Transactions of the Berlin Academy for 1861, pp. 282 sq., 344 sq.

The failure of Dr. Haug, then, to found a Vedic chronology upon this observation is as much more signal than that of his predecessors, as the use which he has sought to make of it is more definite and confident.

Let me not be misunderstood as attributing to the Hindus special incapacity for astronomy, or special awkwardness in the management of their calendar. They did all that could be expected of them, with their means and their habits of mind, towards reconciling and adjusting the trying differences of solar and lunar time; and with all the success which was needful for their purposes. I am only protesting against the misconceptions of those who would ascribe to them wants and desires, and credit them with mechanical devices, in no way answering to their condition. To look for an exact observation of the place of the colures in a treatise which adopts a year of 366 days, and assumes and teaches the equable increase and decrease of the length of the day from solstice to solstice, is obviously in vain: to calculate a precise date from such an observation is but to repeat, in another form, the worst errors of Bailly and Bentley.

New Haven, Conn., U. S. A., June, 1864.

*Note on the preceding Article, By SIR EDWARD COLEBROOKE,
BART., M.P., PRESIDENT R.A.S.*

HAVING been led from the interest which has attached to Mr. Colebrooke's opinion, on the subjects discussed in Professor Whitney's paper, to examine the very copious memoranda on Hindu astronomy, which are in my possession, I think I am in a position to clear up some of the points which have given rise to this controversy. It seemed to be so improbable that Mr. Colebrooke should have taken such pains to identify the constellations named in the passage of the Jyotish, and have so pointedly referred to the double observation of the solstices as determining the epoch of the observation, while he was really grounding his opinion on the position of another asterism, that I thought the subject merited a closer scrutiny.

I do not question the fairness of Professor Whitney's ingenious conjecture, in the absence of direct evidence, as to the opinions of these eminent scholars. It might have been allowable for Mr. Davis or Mr. Colebrooke to have contended in the manner here attributed to them, that the description of the solstitial colure as passing through the *middle* of Âshleshâ was to be taken loosely, and that it might be reconciled with the position of Kṛttikâ as representing the equinox. This suggestion on the part of Professor Whitney derives some support from another passage in the same essay on the Vedas,¹ where the origin of the zodiac at the beginning of Kṛttikâ is spoken of as agreeing with the middle of Âshleshâ, if the divisions of the zodiac are reckoned at twenty-seven equal portions, and its end if they are twenty-eight. Whatever may have been his opinions on this point, I cannot doubt, on reading the passage at the conclusion of

¹ *Miscellaneous Essays*, i. p. 90.

the essay, that his conclusion, as to the date of the calendar, is founded on the position assigned to the solstitial colures, and upon them only.

I do not propose to enter upon the wider question, which is raised in this paper—how far these ancient observations are to be accepted as approximative evidence of dates. The reasons adduced by Professor Whitney for doubting whether the lunar mansions represented equal divisions of the ecliptic at this ancient period, are very cogent, and must approve themselves to those who are conversant with practical astronomy. The margin which he allows for error (1000 years) seems far too wide, and I think it could be shown that a higher probability attaches to the twelfth or thirteenth century a.c., in the case before us, than to those which may be included within the limits of possible error. I confine myself for the present to the question discussed at the commencement of the essay, viz., the grounds of Mr. Davis' and Mr. Colebrooke's opinions.

Now on turning to Mr. Davis's paper on the Indian Cycle of Sixty Years (*Asiatic Researches*, vol. iii. p. 225), I find the following passage:—

"To render the paper more intelligible, I have subjoined a diagram of the Hindu ecliptic, which may also serve to illustrate some astronomical papers in the preceding volume. Its origin is considered as distant 180 degrees in longitude from *Spica*: a star which seems to have been of great use in regulating their astronomy, and to which the Hindu tables of the best authority, though they differ in other particulars, agree in assigning six signs of longitude counted from the beginning of *Aurini*, their first *Nacshatra*."

The distance in longitude of the same star from the equinox in 1750 was, according to Herschell,¹ 20° 21'. At the rate of seventy-two years for each degree of pre-

¹ *Astronomy*, 381. Mr. Colebrooke's MS. memoranda gives the following calculation "Spica in 1800, R.A. 198° 40' 1", whence long 21° 3'." Allowing for the difference of dates this gives the same result as Herschell. I have compared these with several catalogues of stars of the last century, and they agree within a minute when reduced to the same date. It is probable, therefore, that Mr. Davis assumed a different rate of precession than that which is used in the text.

cession we are carried back to the year A.D. 285, when the star was on the equinox. Assuming that the equinox had receded one sign and three quarters since the epoch of the old observation, we are brought to the year B.C. 1395. This comes so near Davis's date (A.C. 1391. *Asiatic Researches*, vol. v. p. 288) as to leave very little doubt as to the grounds of Mr. Davis's opinion.

It is open to question whether Davis was justified in placing his reliance on this star in preference to Revati. Professor Whitney assumes that only two courses are open to us, either to accept the observation of the latter as determining the origin of the Zodiac or to average the errors of all the junction stars. The objection to the latter course is that these stars cannot be said to be identified with equal certainty and the observations are of unequal value. No doubt has ever existed with regard to the two above named stars, which respectively represented the equinoxes, and were probably observed with greater care than many of the others. The place assigned to Spica by Davis is that of the *Sūrya-Siddhānta*, and is inconsistent with the position assigned to the same star in other works. But, on the other hand, it may be contended that the observation of one so conspicuous as Spica is of higher value than that of ζ Piscium, a star of the fifth magnitude, and barely visible to the naked eye. It will be seen presently that Mr. Colebrooke took the average of the two.

It is assumed in the preceding remarks that there was no question as to the time which was supposed to have elapsed since the old record of the position of the colures and the modern observations which determined the origin of the zodiac. It is inferred by Davis and his contemporaries, from the passages quoted from the writings of Varāha Mihira and other astronomers, of what may be called the modern school, that the equinox had receded one sign and three quarters since the ancient epoch, and that they were dealing with a division of the zodiac into twenty-seven and not twenty-eight asterisms. The precessional motion is therefore taken at $23^{\circ} 20'$, equivalent to a difference of date of 1680 years.

Confirmation of this will be found in Davis' diagram, already referred to. Lines are drawn marking the former position of the colures, and the equinox is placed at 10° of Bharani, the position assigned to it in his former essay; other lines mark the limits of the precession, resulting from the Hindu method of computing it, alluding apparently to the supposed oscillation of the equinoxes to the extent of twenty-seven degrees on either side.

Turning now to Mr. Colebrooke's views, the evidence of his reliance on this observation of the star Spica is even more distinct than with regard to Davis. At the conclusion of an elaborate examination of the allowance for precession in the Benares Almanac I find the following remarks:¹—

"It is by Spica then that the Sūrya-Siddhānta's origin of Mesha is determined.

"Origin of Mesha according to the Sūrya-Siddhānta, taking the mean of the places of Revati and Chitrā $19^{\circ} 16' 30''$ from the equinox of 1800."

The former passage is scored through, together with some calculations that precede it, and the latter left as his final conclusion. The inference seems irresistible, that he had at one time leant to the views of Davis, but he finally concluded that it would be safer to take a mean of the two observations.

The grounds of his reliance on the observation of Spica do not appear very distinctly from the papers before me. His aim was evidently to deduce from the very errors of the Hindu rules some conclusion as to the probable epoch of their formation. Thus it appears, from his comparison of the time of the vernal equinox given in the Benares Almanac with that of the Nautical Almanac for 1806, that there is a difference, after making allowance for longitude which, when reduced to minutes and seconds of a degree, amounts to $53' 18''$. Deducting this from the longitude, assigned in the same almanac to the sun on entering Mesha, the result agrees within one minute with the amount of precession calculated by the rules of the Sūrya-Siddhānta. This quantity of $53' 18''$ represented, according to his views, the accumulated error arising

¹ The manuscript from which I quote bears the watermark of 1803.

from the excess of the amount of yearly precession according to the *Sūrya-Siddhānta* over that assigned by modern science. The difference of equinoxes, $53' 18''$, divided by this excess ($3\frac{1}{2}''$), gives 853 years, which he thinks represents the period which has elapsed since the beginning of *Meṣha* was determined where it now is. From calculations, similar in character, he arrives at another epoch of 1059 years. Intermixed with these calculations, which are worked out with some elaboration, are comparisons between the amount of precession, according to the rules of *Sūrya-Siddhānta*, with the longitude of *Revatī* according to the same work, and the position assigned to the same star by *Brahmagupta*. These again are compared with the longitude of *Chitrā* (*Spica*) and the mean longitude assigned to the sun on entering *Meṣha*. The evidence which this manuscript affords of the close scrutiny this question underwent will, I doubt not, prove of interest, though I am unable to trace the grounds of his conclusion with regard to the origin of the Zodiac. He was evidently struck by the fact that the longitude of *Spica* was but little in excess of the position assigned to the equinox in the modern astronomy of the Hindus. It is more so with regard to their allowance for precession. All the quantities exceed considerably the longitude of *Revatī*. His aim was to restore a curious chapter in the history of Hindu astronomy, but the notes are incomplete and partially erased, and he finally concluded that we should not expect precision on such a question. His distrust of the accuracy of the old observations is frequently expressed in his published works, and nowhere more strongly than in a short paper in the *Asiatic Journal*, for 1806, in reply to the strictures of Bentley.

I would invite those who may desire to pursue the subject further, to note the use he has made of astronomical data, in his attempt to determine the age of *Varāha Mihira* and *Brahmagupta*, in his work on Hindu Algebra.¹ In the former case he takes the mean of two observations of the star *Chitrā*, viz., that of the *Sūrya Siddhānta*, and the position assigned to it by *Brahmagupta*. With regard to *Brahmagupta*

¹ Notes F and K appended to the dissertation.

he gives the date which might be deduced from that author's mention of the position of Chitrâ. This is compared with the position assigned to Revatî, and the mean of the two is given. This again is compared with the position assigned to Canopus and Sirius by the same author.

If the mature opinions of an author are to be gathered from his latest writings, it is clear that those of Mr. Colebrooke on this question of chronology are marked with the same cautious criticism which distinguished his other writings. The practical astronomy of the Hindus is described in his reply to Bentley as too loose and imperfect to be employed otherwise than as approximative evidence of dates, and the use he made of the materials before him was consistent with this principle. The only exception, if it be one, is in the reference to the Jyotish in his *Essay on the Vedas*. Could he have foreseen that he would be afterwards quoted in asserting that "the position of the solstitial points at the beginning of Dhanisthâ, and in the middle of Âshleshâ could have been a reality at no time except in the fourteenth century a.c.,"¹ he would probably have qualified the passage in question on the re-publication of his essays.² It is clear to me on reading this passage with the light thrown upon it by his other writings, that nothing was further from his thoughts than the dogmatism here attributed to him, and that no one would more readily have admitted that any inference with regard to dates must be taken with a very considerable margin for error, possibly to the extent of two centuries on either side.

At the risk of swelling this note to too great length, I add a remark on Professor Whitney's conjecture, that in the primitive astronomy of the Hindus the asterisms had no precise boundaries, but marked only that portion of the moon's path which was adjacent to the distinguishing constellation. It would follow that an ancient observer, when he referred to the beginning of an asterism, had in his mind only the boundary of the constellation. If we apply this to

¹ Max Muller, on "Ancient Hindu Astronomy and Chronology," p. 21.

² It is to be observed that the mean of Revatî and Chitrâ given above would carry us to the latter part of the thirteenth century a.c.

the record of the Jyotish, and accept Mr. Colebrooke's identification of the constellation Dhanishthâ, we shall find that the solstitial colure passed through the star β Delphini, which is the most western of the group¹, in the middle of the fourteenth century, a.c. Nothing so precise can be deduced from the examination of the opposite point of the ecliptic, for we have no such defined group as the Delphini; and Mr. Colebrooke and Professor Whitney are at issue in their attempt to identify the constellation Âṣleshâ. Archdeacon Pratt assumes that Mr. Colebrooke could not have taken the constellations thus loosely, because the star ϵ Delphini and ζ Hydree would only give an additional precession of 40' to his own previous conclusion. Had, however, he turned to Mr. Colebrooke's essay on the zodiac, he would have found that neither of these stars are included by him in the constellations in question, and that the star groups selected by him support the view of higher antiquity. The point deserves some attention, apart from any question as to Mr. Colebrooke's views on the subject.

¹ The right ascension of the star was, in 1800, $307^{\circ} 2' 3''$, according to Zach's tables. From this I make the longitude $313^{\circ} 33'$, which was the position of the solstitial colure about the year a.c. 1336.

ART. XIII.—*Progress of the Vedic Religion towards Abstract Conceptions of the Deity.*¹ By J. Muir, Esq.

[Read November 21, 1864].

IN a passage which I have already quoted in my former paper on the Vedic mythology (p. 59, Yāska, the author of the Nirukta, informs us (vii. 5) that previous writers of the school to which he himself belonged (the Nairuktas) reduced the deities mentioned in the Vedas to three—viz., “Agni, whose place is on the earth, Vāyu or Indra, whose place is in the air, and Sūrya, whose place is in the sky;” and asserted that “these deities had severally received many appellations in consequence of their greatness, or of the diversity of their functions, as the names of *hotr*, *adhvaryu*, *brahman*, and *udgātṛ*, are applied to one and the same person [according to the particular sacrificial office which he happens to be fulfilling].” In the preceding section (vii. 4) Yāska goes still further and declares that “owing to the greatness of the deity, the one Soul is celebrated as if it were many. The different gods are separate members of the one Soul.”² These, however, are the views of men who lived after the compilation of the Brāhmaṇas, at a period when reflection had long been exercised upon the contents of the hymns, and when speculation had already made considerable advances. In the oldest portions of the hymns themselves we discover few traces of any such abstract conceptions of the Deity. They disclose a much more primitive stage of religious belief. They are, as I have already attempted to show, the productions of simple men who, under the influence of the most impressive phenomena of nature, saw everywhere the presence and agency of divine powers, who

¹ In various parts of the translations occurring in this paper I have received valuable assistance from Professor Aufrecht.

² This passage is quoted at length in *Sanskrit Texts*, iv. 131-136.

imagined that each of the great provinces of the universe was directed and animated by its own separate deity, and who had not yet risen to a clear idea of one supreme creator and governor of all things (pp. 52-54). This is shown not only by the special functions assigned to particular gods, but in many cases by the very names which they bear, corresponding to those of some of the elements or of the celestial luminaries. Thus, according to the belief of the ancient rishis, Agni was the divine being who resides and operates in fire, Sūrya the god who dwells and shines in the sun, and Indra the regent of the atmosphere who cleaves the clouds with his thunderbolts and dispenses rain. While, however, in most parts of the Rig Veda, such gods as Agni, Indra, and Sūrya are not merely considered as distinct from one another, but are multiplied into a variety of separate divinities (as Jātavedas, Parjanya, Viṣṇu, Savitr, etc.) there are other hymns in which a tendency to identification is perceptible and traces are found of one uniform power being conceived to underlie the various manifestations of divine energy. Thus in the texts quoted in my former essay (pp. 127 f.) Agni is represented as having a threefold existence; first, in his familiar form on earth; secondly, as lightning in the atmosphere; and thirdly, as the sun in the heavens. In other passages where the same god is identified with Viṣṇu, Varuṇa, Mitra, etc. (see p. 130), it is not clear whether this identification may not arise from a desire to magnify Agni rather than from any idea of his essential oneness with the other deities with whom he is connected (see also R. V. i. 141, 9; v. 3, 1; v. 13, 6). In another hymn, too, where Indra is represented as the same with Varuṇa (p. 104), the design of the writer may have been to place the former god on a footing of equality with the latter.

There are, however, other passages in the earlier books of the Rig Veda which suffice to show that the writers had begun to regard the principal divinities as something more than mere representatives or regents of the different provinces of nature. As I have already shown (pp. 80, 97 f., 115, 117, 128) Indra, Varuṇa, Sūrya, Savitr, and Agni are severally described (in strains

more suitable to the supreme Deity than to subaltern divinities exercising a limited dominion) as having formed and as sustaining heaven and earth, and as the rulers of the universe ;¹ and Varuna, in particular, according to the striking representation of the hymn preserved in the A. V. iv. 16 (though this composition may be of a somewhat later date), is invested with the divine prerogatives of omnipotence and omniscience. Although the recognized co-existence of all these deities is inconsistent with the supposition that their worshippers had attained to any clear comprehension of the unity of the godhead, and although the epithets denoting universal dominion which are lavished upon them all in turn may be sometimes hyperbolical or complimentary,—the expressions of momentary fervour,—or designed to magnify a particular deity at the expense of all other rival objects of adoration, yet these descriptions no doubt indicate enlarged and sublime conceptions of divine power and an advance towards the idea of one sovereign deity. When once the notion of particular gods had become expanded in the manner just specified and had risen to an ascription of all divine attributes to the object of worship who was present for the time to the mind of the poet, the further step would speedily be taken of speaking of the deity under such new names as *Viṣvakarman* and *Prajāpati*, appellations which were not suggested by any limited function connected with any single department of nature, but by the more general and abstract notion of divine power operating in the production and government of the universe.

It is in names such as these that we discover the point of transition from polytheistic to monotheistic ideas. Both these two terms, which ultimately came to designate the deity regarded as the creator, had been originally used as epithets of Indra and Savitr, in the following passages :—R. V. iv. 53, 2, "Savitr, the supporter of the sky (and) of the world, the lord of creatures (*prajāpati*)."² viii. 87, 2. "Thou, Indra,

¹ The same functions are ascribed to Vishnu and to Rudra. See Sanskrit Texts, iv. pp. 84 and 328.

² So, too, Soma is called *prajāpati*, "lord of creatures" (R. V. ix. 5, 9).

art most powerful; thou hast caused the sun to shine; thou art great, the universal architect (*viśvakarman*), and the god of all (*viśvadeva*)."¹

I shall now adduce those passages of the Rig Veda in which a monotheistic or a pantheistic tendency is most clearly manifested. Of some of these texts I shall only state the substance, as I have formerly treated of them in detail elsewhere.

The following verse from a long hymn of an abstruse and mystical character (i. 164, 46), though considered by Yāska to have reference to Agni, and by Kātyāyana and Sāyana (with perhaps more probability) to have Sūrya in view, may nevertheless be held to convey the more general idea that all the gods, though differently named and represented, are in reality one—πολλῶν ὀνομάτων μορφὴ μία: "They call him Indra, Mitra, Varuna, Agni; and (he is) the celestial well-winged Garutmat. Sages name variously that which is but one: they call it Agni, Yama, Mātariśvan."² (See Colebrooke's *Ess.* i. 26 f.; Weber's *Ind. Stud.* v. p. iv).

R. V. i. 89, 10 (quoted in my former paper, p. 69), suggests, on the other hand, a pantheistic sense, as it asserts all things to be the manifestations of one all-pervading principle: "Aditi is the sky, Aditi is the air, Aditi is the mother and father and son. Aditi is all the gods and the five classes of men. Aditi is whatever has been born, Aditi is whatever shall be born."³ Reference will be made further on to the

¹ So, too, in R. V. x. 170, 4, Sūrya is called *viśvakarman* and *viśvadevyaśat*.

² In the same way it is said, A. V. xiii. 3, 13: "Agni becomes in the evening Varuna (the god of night), and Mitra, when rising in the morning. Becoming Savitṛ, he moves through the atmosphere, and becoming Indra, he burns along the middle of the sky." In xiii. 4, 1 ff., Savitṛ is identified with a great many other deities. The words *asya devasya . . . vayāḥ Viśvaḥ*, in R. V. vii. 40, 6, are interpreted by Sāyana to mean "[The other gods] are branches of this . . . god Viśvaḥ;" but the words between brackets are not in the original.

I observe that in his lectures on the "Science of Language," 2nd ser. p. 508, Prof. Müller understands the words with which all the verses of R. V. iii. 55, conclude (*mahad devānam asuratvam ekam*) to signify, "The great divinity of the gods is one," as if they asserted all the gods to be manifestations of one supreme deity. The clause, however, need not mean anything more than that the divine power of the gods is *unique*.

³ Compare Æschylus, fragment 443, translated by Prof. Müller, "Science of Language," ii. 441: Ζεὺς ἐστὶν ἀσθερ, Ζεὺς δὲ γῆ, Ζεὺς δ' οὐρανός· Ζεὺς τοι τὰ πάντα χεῖρ τι τῶνδ' ἐνέπρεπον. The Taittiriya Brāhmaṇa, iii. 12, 3, 1, says that the self-existent Brahma is "son, father and mother."

hymn in which Aditi is described as one of the great powers to which the creation is due.

In some of the representations of the character and functions of Tvashṭr, the divine artizan, who shaped the heaven and earth, we have an approach to the idea of a supreme creator of the universe (see my former paper, p. 132).

There is a considerable variety in the methods by which the later poets of the R. V. attempt to conceive and express the character of the Supreme Being and his relations to the universe, as will be seen from the following details:—

VIŠVAKARMA.

The 81st and 82nd hymns of the tenth book of the Rig Veda,¹ are devoted to the celebration of Viśvakarman, the great architect of the universe; so that the word which, as we have seen, had formerly been used as an epithet of Indra, had now become the name of a deity, if not of the Deity. In these hymns Viśvakarman is represented as the one all-seeing god, who has on every side eyes, faces, arms, and feet, who, when producing heaven and earth, blows² them forth with his arms and wings,—as the father, generator, disposer, who knows all worlds, gives the gods their names, and is beyond the comprehension of mortals. In one of the verses (the 4th) of the first of these hymns, the poet asks: "What was the forest, what was the tree, out of which they fashioned heaven and earth? Enquire with your minds, ye sages, what was that on which he took his stand when supporting the world?" This verse is repeated in the Taittirīya Brāhmaṇa ii. 8, 9, 6 (and comes in immediately after the end of R. V. x. 129, which is quoted in the same place). The compiler of the Brāhmaṇa replies to the question which the original poet, either from accident or ignorance, had left unanswered, by saying: "Brahma was the forest, Brahma was that tree, out of which they fashioned heaven and earth. Sages, with my mind I declare to you, he took his stand upon Brahma when upholding the world."

¹ See p. 58 of former paper, and Sanskrit Texts, iv. 4 ff.

² This image is repeated in R. V. x. 72, 2; and may have been borrowed from R. V. iv. 2, 17.

HIRANYAGARBA.

Another name under which the deity is celebrated in the Rig Veda, with all the attributes of supremacy, is Hiranyagarbha. In the 121st hymn of the tenth book this god is said to have existed (or to have arisen, *samavarttata*) in the beginning, the one lord of all beings, who upholds heaven and earth, who gives life and breath, whose command even the gods obey, who is the god over all gods, and the one animating principle (*asu*) of their being." (See Sanskrit Texts iv. 13 ff.).

BRAHMANASPATI, DAKSHA, AND ADITI.

There is another hymn (R. V. x. 72 ; already quoted in my former paper, p. 72) in which the creation of the gods is ascribed to Brahmanaspati,¹ who blew them forth like a blacksmith ;² while the earth is said to have sprung from a being called Uttānapad ; and Daksha and Aditi were produced from one another by mutual generation. The gods, though formed by Brahmanaspati, did not, it is said, come into existence till after Aditi, and appear to have had some share in the formation or development of the world.

This hymn is almost entirely of a mythological character, the only attempt at speculation it contains being the declaration that entity sprang from nonentity. The manner in which the author endeavours by the introduction of different names, and the ascription to them of various agencies, to explain the process of creation, forms a striking contrast to the sublime vagueness and sense of mystery which characterize the following composition (R. V. x. 129) :³

¹ Brahmanaspati is elsewhere (R. V. ii. 26, 3) styled "the father of the gods," while Brhaspati (a kindred, if not identical, deity) is called "our father" (R. V. vi. 73, 1). And yet Brahmanaspati is himself said in R. V. ii. 23, 17, to have been generated by Tvashtṛ superior to all creatures. On the character of this god the reader may consult some ingenious remarks by Professor Roth in the first volume of the Journal of the German Oriental Society, pp. 72 ff., and Professor Wilson's notes to his translation of the Rig Veda, vol. i. pp. 41 and 43, and vol. ii. pp. 262 and 263. I may take an opportunity to give an account of this deity, as well as of several others, whom I have not yet handled, in a future paper.

² See above, p. 343.

³ This hymn has been already translated by Mr. Colebrooke and Professor Müller, as well as in Sanskrit Texts, iv. 4. I have now endeavoured to improve

NONENTITY, ENTITY, AND THE ONE.

"1. There was then neither nonentity nor entity: there was no atmosphere, nor sky above. What enveloped [all]? Where, in the receptacle of what, [was it contained]? Was it water, the profound abyss? 2. Death was not then, nor immortality: there was no distinction of day or night. That One¹ breathed calmly, self-supported: there was nothing different from, or above, it. 3. In the beginning darkness existed, enveloped in darkness. All this was undistinguishable water.² That One, which lay void, and wrapped in nothingness, was developed by the power of fervour (*tapas*). 4. Desire (*kāma*) first arose in It, which was the primal germ of mind; [and which] sages, searching with their intellect, have discovered in their heart to be the bond which connects entity with nonentity. 5. The ray [or cord]³ which stretched across these [worlds], was it below or was it above? There were there impregnating powers and mighty forces, a self-supporting principle beneath, and energy aloft.⁴ 6. Who

my own version, and otherwise to illustrate the sense of the hymn. I have attempted the following metrical rendering of its contents —

"Then there was neither Aught nor Nought, no air nor sky beyond.
What covered all? Where rested all? In watery gulf profound?
Nor death was there, nor deathlessness, nor change of night and day.
That One breathed calmly, self-sustained, nought else beyond It lay.
Gloom hid in gloom existed first—*one* sea,cluding view.
That One, a void in chaos wrapt, by inward fervour grew.
Within it first arose desire, the primal germ of mind,
Which nothing with existence links, as sages searching find.
The cord, transversely stretched, that spanned this universal frame,
Was it beneath? was it above? Can any sage proclaim?
There fecundating powers were found, and mighty forces strove,
A self-supporting mass beneath, and energy above.
Who knows, who ever told, from whence this vast creation rose?
No gods had then been born,—who then can e'er the truth disclose?
Whence sprang this world, and whether framed by hand divine or no,—
It's lord in heaven alone can tell, if even he can show."

¹ Compare R V. i. 164. 6. "What was that One in the form of the unborn which supported these six worlds?"

² In the M. Bh. Santip. 6812 ff. it is said that from the æther was produced water, "like another darkness in darkness," and from the foam of the water was produced the wind.

³ Professor Aufrecht has suggested to me that the word *ragmī* may have here the sense of thread, or cord, and not of ray.

⁴ Does this receive any illustration from R V. i. 169. 2 (quoted in the former paper on Ved. Mythology, p. 64), which speaks of the "thought (*manas*) of the father" (*Ityasa*), and of the "mighty independent power (*mahi svataṁsa*) of the mother" (Earth)?

knows, who here can declare, whence has sprung, whence, this creation? The gods are subsequent to the formation of this [universe]; who then knows whence it arose? 7. From what this creation arose, and whether [any one] made it or not,—He who in the highest heaven is its ruler, he verily knows, or [even] he does not know."

I am not in possession of Sâyana's commentary on this hymn; but the scholiast on the Taittiriya Brâhmaṇa, in which it is repeated (ii. 8, 9, 3 ff.), explains it in conformity with the philosophical ideas of a later period. From such sources we have no right in general to expect much light on the real meaning of the ancient Vedic poets. The commentator in question, who is obliged to find in the words of the infallible Veda a meaning consistent with the speculations believed to be orthodox in his own age, interprets the first verse as follows, in terms which, indeed, after all, may not be far from correctly expressing its general purport: "In the interval between the absorption of the previous, and the production of the subsequent, creation, there was neither entity nor nonentity. The world at the time when, by possessing both 'name' and 'form'¹ it is clearly manifested, is designated by the word 'entity,' while a void which may be compared to such non-existing things as a 'man's horns,' etc., is called 'nonentity.' Neither of these states existed: but there was a certain unapparent condition, which from the absence of distinctness was not an 'entity,' while from its being the instrument of the world's production, it was not a 'nonentity.'"

A much older commentary on this verse, probably one of the oldest extant, is the following passage from the Śatapatha Brâhmaṇa, x. 5, 3, 1: "In the beginning this [universe] was, as it were, nonentity. In the beginning this universe was, as it were, and was not, as it were. Then it was only that mind. Wherefore it has been declared by the rishi (in the

¹ These Vedântic terms *name* and *form* occur (as observed in my paper on Yama) in the Atharva Veda, x. 2, 12. "Who placed in him (Purusha) name, magnitude, and form?" and in xi. 7, 1. "In the remains of the sacrifice (*urâ-Asûkâ*) name and form, in the remains of the sacrifice the world, is comprehended." See §. P. Br. xi. 2, 3, 1, to be quoted below.

verse before us), 'There was then neither nonentity, nor entity;' for mind was, as it were, neither entity nor non-entity. 2. Then this mind being created, wished to become manifested, more revealed, more embodied. It sought after itself; it performed rigorous abstraction. It swooned. It beheld 36,000 of its own fires," etc. Mind then creates voice, voice creates breath, breath creates eye, eye creates ear, ear creates action (or ceremony), and action creates fire.

These ideas of entity and nonentity seem to have been familiar to the Vedic poets, as in R.V. x. 72 (noticed above, and translated in my paper on the Vedic Theogony, p. 72), we find it thus declared (vv. 2, 3), that in the beginning non-entity was the source of entity: "In the earliest age of the gods entity sprang from nonentity; in the first age of the gods entity sprang from nonentity." In the Atharva Veda, x. 7, 10, it is said that both nonentity and entity¹ exist within the god Skambha; and in v. 25 of the same hymn; "powerful indeed are those gods who sprang from nonentity. Men say that that nonentity is one, the highest, member of Skambha."² The Taittiriya Upanishad also (p. 99) quotes a verse to the effect: "This was at first nonentity. From that sprang entity."

The author of the Chhândogya Upanishad probably alludes to some of these texts when he says (vi. 2, 1 f. Bibl. Ind. p. 387 f.):³ "This, O fair youth, was in the beginning existent (or entity) (*sat*), one without a^d second. Now some say, 'This was in the beginning non-existent (or non-entity) (*asat*), one without a second: wherefore the existent must spring from the non-existent.' 2. But how, O fair youth, he proceeded, can it be so? How can the existent spring

¹ Another verse of the A.V. xvi. 1, 19, says "Entity is founded (*pratishthitam*) on nonentity, what has become (*bhûta*) is founded on entity. What has become is based (*shritam*) on what is to be, and what is to be is founded on what has become."

² This phrase is also applied to Agni in R. V. x. 5, 7, where it is said that that god, being "a thing both *asat*, non-existent (i.e. unmanifested), and *sat*, existent (i.e. in a latent state, or in essence), in the highest heaven, in the creation of Daksha, and in the womb of Aditi (comp. R. V. x. 72, 4 f.), became in a former age the first-born of our ceremonial, and is both a bull and a cow." In A. V. xi. 7, 3, it is said that the *udhishtha* (remains of the sacrifice) is both *am* and *asam* (masculine).

³ See English trans. p. 101; which I have not followed.

from the non-existent? But, O fair youth, this was in the beginning existent, one without a second. That [entity] thought, 'Let me multiply and be produced.' "

There does not appear to be any discrepancy between the statement in R. V. x. 129, 1, "there was then neither nonentity nor entity," and the doctrine of the Chhândogya Upanishad, for in the second verse of the hymn, also, a being designated as the One is recognized as existing, which may be regarded as answering to the primal entity of the Upanishad; while the original non-existence of anything, whether nonentity or entity, asserted in the first verse, may merely signify, as the commentator on the Taittiriya Brâhmana explains, that there was as yet no distinct manifestation of the One. In like manner the A. V. x. 7, 10, 25 (quoted above), does not assert the absolute priority of nonentity, but affirms it to be embraced in, or a member of, the divine being designated as Skambha. The Chhândogya Upanishad has, however, a greater appearance of being at variance with itself, iii. 19, 1 (*asad evedam agre dñt tat sad dñt*), and with the Taittiriya Upanishad, as well as with verses 2 and 3 of the 72nd hymn of the tenth book of the R. V., above cited, which assert that entity sprang from nonentity. If these verses are to be taken literally and absolutely, we must suppose the poet to have conceived the different creative agents whom he names Brahmanaspati, Uttānapad, Daksha, and Aditi, to have sprung out of nothing, or from each other, or to be secondary manifestations of the entity which was the first product of nonentity. If, however, with the commentators, we take "non-entity" to denote merely an undeveloped state, there will be no contradiction.

The first movement in the process of creation as conceived in the hymn (R. V. x. 129) is this. The One, which in the beginning breathed calmly, self-sustained, is developed by the power of *tapas*, by its own inherent heat (as Prof. Müller explains, *Anc. Sansk. Lit.* p. 561), or by rigorous and intense abstraction (as Prof. Roth understands the word; see his *Lexicon*, s.v.)¹ This development gave occasion to desire (*Kâma*)

¹ Roth's interpretation is supported by a text in the A. V. x. 7, 38 (see further on)

which immediately took possession of the One, and is described as the first germ of mind, and the earliest link¹ between nonentity and entity. The poet then goes on to speak of impregnating powers, and mighty forces, of receptive capacities, and active energies; but confesses himself unable to declare how the universe was produced. The gods themselves having come into existence at a later stage of creation, were not in a position to reveal to their worshippers the

as well as by numerous passages in the Brāhmaṇas. Thus in S P Br xi. 5, 8, 1 (quoted in Sanskrit Texts, iii. 3), Prajāpati, who is described as being the universe, is said to have desired (*akāmayata*) to propagate himself, and to have striven and practised rigorous abstraction (*tapas* 'tapyata'). And in the same Brāhmaṇa, xiii. 7, 1, 1 (cited in Sanskrit Texts, iv. 25), the self-existent Brahma himself is similarly related to have practised *tapas*, and when he found that that did not confer infinity, to have offered himself in sacrifice. The gods are also said to have attained heaven and their divine character by *tapas* (see my former paper on Vedic Mythology, p. 83, and Sanskrit Texts, iv. pp. 20, 21, 24, and 233). Compare also the Taittirīya Upanishad, ii. 6, where it is said "He (the supreme Soul) desired, 'Let me be multiplied, and produced.' He performed *tapas*, and having done so, he created all this." In his commentary on this passage, Sankara explains that knowledge is called *tapas*; and that the phrase means "He reflected upon the construction, etc., of the world which was being created." It is true that all these passages from the Brāhmaṇas are of a later date than the hymn, but the R. V. itself x. 167, 1, says that Indra gained heaven by *tapas*, where the word can only mean rigorous abstraction.

This view of the word is also supported by Taitt. Br. iii. 12, 3, 1. "Let us worship with an oblation that first-born god, by whom this entire universe which exists is surrounded (*paribhūtam*)—the self-existent Brahma, which is the highest *tapas*. He is son, father, mother. *Tapas* was produced as the first object of devotion."

In the Mahābhārata, Śāntiparva, 10836, Prajāpati is said to have created living beings by *tapas*, after having entered on religious observances, or austerities (*eratāni*).

Tapas is also mentioned as the source from which creatures were produced, A. V. xiii. 1, 10.

Compare Bhāgavata Purāṇa ii. 9, 6, 7, 19, 23, and iii. 10, 4 ff.

Tapas is connected with an oblation of boiled milk in a passage of the A. V. iv. 11, 6. "May we, renowned, attain to the world of righteousness by that ceremony of offering boiled milk, by *tapas*, whereby the gods ascended to heaven, the centre of immortality, having left behind their body." And xi. 5, 6, connects *tapas* with heat. "The Brahmachārin, born before Brahma, dwelling (or clothed) in heat, arose through *tapas*."

In A. V. vii. 61, *tapas* is connected with Agni.

In A. V. xvii. 1, 24, *tapas* means the heat of the sun.

Tapas is mentioned along with *karma* in A. V. xi. 8, 2, and is said to have been produced from it (*ibid.* v. 6).

¹ The commentator on the Taittirīya Brāhmaṇa, ii. 8, 9, 5 (p. 923 of Calcutta edition, in Bibl. Ind.) says "The Vājasaneyius record that desire is the cause of all action, and say, 'this Puruṣa is himself actuated by desire' (Bṛhadār. Up. p. 854). And Vyāsa too declares in his smṛiti, 'That which binds this world is desire, it has no other bond.' The same thing, too, is seen within our own observation; for it is only after a man has first desired something that he strives after it, and so experiences pleasure or pain." In numerous passages of the Brāhmaṇas and Upanishads (as in those quoted in the last note), we are told that the first step in the creation was that Prajāpati or Brahma desired (*akāmayata*).

it, from the absence of any other proper means of knowledge or inference, this great mystery can only be understood from the revelation in the Vedas.

"The last verse of the hymn declares that the ruler of the universe knows, or that even he does not know, from what material cause this visible world arose, and whether that material cause exists in any definite form or not. That is to say, the declaration that 'he knows' is made from the stand-point of that popular conception which distinguishes between the ruler of the universe, and the creatures over whom he rules; while the proposition that 'he does not know' is asserted on the ground of that highest principle which, transcending all popular conceptions, affirms the identity of all things with the supreme Soul, which cannot see any other existence as distinct from itself."

The sense of this last clause is, that the supreme Soul can know nothing of any object external to itself, since no such object exists.

It would, however, be absurd to suppose that the simple author of the hymn entertained any such transcendental notion as this. He makes no pretension to infallibility, but honestly acknowledges the perplexity which he felt in speculating on the great problem of the origin of the universe.¹

As a further illustration both of the more ancient and the later ideas of the Indians regarding the creation of the world, and the manner in which the supreme Spirit, previously quiescent, was moved to activity, I add another passage from the Taittiriya Brâhmaṇa ii. 2, 9, 1, with some of the commentator's remarks. The text of the Brâhmaṇa runs thus: "This [universe] was not originally anything. There was neither heaven, nor earth, nor atmosphere. That, being nonexistent (*asat*), thought, 'Let me be.' That became kindled (or practised rigorous abstraction, *atapyata*). From that heat (or abstraction) smoke was produced. That was again kindled (*atapyata*). From that heat fire was produced. That was again kindled. From that heat light was pro-

¹ Similar perplexity is elsewhere expressed on other subjects by the authors of the hymns. See Sanskrit Texts, iii. 177.

duced." And so on,—flame, rays, blazes, etc., being generated by a repetition of the same process. (It may perhaps be considered that the manner in which the word *tapas* is used in this passage is favourable to the idea that in R. V. x. 129, 3, it signifies heat rather than rigorous abstraction).

Taitt. Br. ii. 2, 9, 10. "From nonentity mind (*manas*) was created. Mind created Prajâpati. Prajâpati created offspring."

The commentator's explanation of the first part of this passage is in substance as follows: "Before the creation no portion existed of the world which we now see. Let such a state of non-existence be supposed. It conceived the thought, 'Let me attain the condition of existence.' Accordingly this state of things is distinctly asserted in the Upanishad: 'This was originally non-existent. From it existence was produced.' Here by the word 'non-existent' a state of void (or absolute nullity), like that expressed in the phrase 'a hare's horns,' is not intended; but simply a state in which name and form were not manifested. Hence the Vâjaseaneyins repeat the text: 'This was then undeveloped: let it be developed through name and form.' Earth, the waters, etc., are 'name.' Hardness and fluidity, etc., are 'form.'" The words "undeveloped" and "developed" are then defined, and Manu i. 5, is quoted in proof. The supposition that the passage before us can be intended to denote a void is next contravened by adducing the text of the Chhândogya Upanishad above quoted, where that theory is referred to and contradicted. "In the Aitareya Upanishad (at the beginning) it is declared: 'Soul alone was in the beginning this [universe]. Nothing else was active.' Hence the negation in our text, 'This [universe] was not originally anything,' refers to the world, consisting of name and form, framed by the supreme Spirit, and is not to be understood absolutely. Designated by the word 'non-existent' (*asat*) because devoid of name and form, but still (really) existing (*sat*), the principle [called] the supreme Spirit, impelled by the works of the creatures absorbed in It, conceived a thought in the way of a reflection, 'Let me be manifested as existent in the shape

of name and form.' As a man in a deep sleep awakes that he may enjoy the fruit of his works; so the thought of causing all living creatures to enjoy the fruit of their works arose in the supreme Spirit. Possessed by such a thought, that principle [called] the supreme Spirit, practised rigorous abstraction (*tapas*) as a means of creating name and form. Here *tapas* does not mean any such thing as the *kṛcchra* or *chāndrāyana* penances, or the like; but denotes consideration regarding the particular objects which were to be created. Wherefore the Atharva Veda writers record the text, 'He who is omniscient, all-understanding, whose *tapas* consists of knowledge.' From the fact that this *tapas* has nothing of the character of any penance, it is shown to denote the reflection of a being who though unembodied is yet omnipotent," etc., etc. "From the supreme God, being such as has been described, in conformity with his volition, a certain smoke was produced," etc., etc.

PURUSHA.

Another important, but in many places obscure, hymn of the Rig Veda, in which the unity of the Godhead is recognized, though in a pantheistic sense, is the 90th of the tenth book, the celebrated Purusha Sūkta,¹ which is as follows:

"1. Purusha has a thousand heads (a thousand arms, A. V.), a thousand eyes, and a thousand feet. On every side enveloping the earth, he transcended [it] by a space of ten fingers. 2. Purusha himself is this whole [universe], whatever has been, and whatever shall be. He is also the lord of immortality, since through food he expands."²

¹ Translations of this hymn (which is also given with slight variations in Vāj. S. 31, 1-16, and A. V. 19, 6, and 7, 5, 4) will be found in Mr. Colebrooke's *Misc. Ess.* i. 167 (see also the note in p. 309 of the same volume); as also in my *Sanskrit Texts*, i. 8 ff., and (into French) in the Preface to Burnouf's *Bhāgavata Purāṇa*, vol. i. pp. cxxx. ff. (where see the notes). I have now endeavored (in some places with the aid of Professor Aufrecht) to improve the translation I formerly gave, and to supply some further illustrations of the ideas in the hymn. I have passed over several obscurities on which I have been unable to throw any light. The first two verses are given in the *Śvetāśvatara Upaniṣad*, iii. 14, 16, where the commentary may be consulted.

² The sense of the last clause is obscure. It may also mean, according to the commentators on the Vāj. S. and the *Śvetāśv. Upan.* "(he is also the lord of) that which grows by food." According to the paraphrase in the *Bhāgavata Purāṇa*

3. Such is his greatness; and Purusha is superior to this. All existing things are a quarter¹ of him, and that which is immortal in the sky is three quarters of him. 4. With three quarters Purusha mounted upwards. A quarter of him again was produced here below. He then became diffused everywhere among things animate and inanimate. 5. From him Virāj was born, and from Virāj, Purusha.²

(see below), it means, "seeing he has transcended mortal nutriment." The parallel passage of the A. V. (19, 6, 4) reads, "he is also the lord of immortality, since he became united with another (*yad anyenābhagat saha*)"

¹ Compare A. V. x. 8, 7 and 13 "7 With the half he produced the whole world; but what became of that which was the [other] half of him? 13. Prajāpati moves within the womb, though unseen, he is born in many forms. With the half he produced the whole world; but the [other] half of him, what sign is there of it?" Compare also A. V. x. 7, 8, 9, which will be found translated further on.

² The commentator on the Vāj. Sanh. (where, as I have said, this hymn is also found) explains this reciprocal generation of Virāj from Purusha, and again of Purusha from Virāj, by saying, in conformity with Vedantic principles, that Virāj in the form of the mundane egg sprang from Ādi-Purusha (primordial Purusha), who then entered into this egg, which he animates as its vital soul or divine principle. According to Manu, i. 8-11, the supreme Deity first created the waters, in which he placed an egg, from which again he himself was born as Brahmā, also called Nārāyaṇa. This male (Purusha), created by the eternal, imperceptible, first Cause, is, as v. 11 repeats, called Brahmā. Brahmā by his own thought split the egg (v. 12). After various other details regarding the creation, the writer goes on to say (v. 32) that Brahmā divided his own body into two halves, of which one became a male (Purusha) and the other a female, in whom he produced Virāj. This male (Purusha) Virāj again creates Manu himself (v. 33). We here see that the word male or Purusha is applied by Manu to three beings—viz., first, to Brahmā (v. 11), second, to the male formed by Brahmā from the half of his own body (v. 32); and thirdly, to Virāj, whom Brahmā, or his male half, produced from the female who was made out of the other half of his body (see also Wilson's *Vishnu Purana*, p. 105, note, in Dr. Hall's edition).

Another explanation of the verse is, however, to be obtained by comparing the similar passage in R. V. x. 72, 4: "Dakṣa sprang from Aditi, and Aditi from Dakṣa," which I have quoted in my former paper (pp. 72 f.), together with the observation of Yāska (*Nirukta*, xi. 23), that this startling declaration may be explicable on the ground that these two deities had the same origin, or, in conformity with a characteristic of their divine nature, may have been produced from each other, and have derived their substance from each other. (See *Nirukta*, vii. 4, quoted in *Sansk. Texts*, iv. 134, where the author repeats the same idea regarding the nature of the gods). Compare A. V. xii. 4, 29 ff., where Indra is said to be produced from a great many different gods, and they reciprocally from him.

The §. P. Br. (xiii. 6, 1, 2) understands Virāj in the passage before us to signify not any male power, but the metre of that name: "The Virāj has forty syllables. Hence he (Purusha) obtains the Virāj, according to the text, 'From him sprang Virāj and from Virāj Purusha.' This is that Virāj. From this Virāj, therefore, it is that he begets Purusha the sacrifice."

Virāj occurs again in the Rīg Veda, ix. 96, 18, and x. 130, 5, as feminine and as the name of a metre. It is also found in x. 150, 3, and x. 166, 1, as well as in i. 188, 5, where it is an adjective. In the A. V. it is of frequent occurrence, and sometimes is an epithet, and sometimes denotes the metre of that name. Thus in ix. 2, 5 (comp. Vāj. Sanh. 17, 3, and §. P. Br. ix. 2, 1, 19) it is said, "That daughter of thine, O Kāma, is called the Cow, she whom ages deno-

As soon as born he extended beyond the earth, both behind and before.¹ 6. When the gods offered up Purusha as a sacrifice, the spring was its clarified butter, summer its fuel, and autumn the [accompanying] oblation. 7. This victim, Purusha born in the beginning, they immolated on the sacrificial grass; with him as their offering, the gods, Sādhyas, and Rishis sacrificed. 8. From that universal oblation were produced curds and clarified butter. He (Purusha) formed those aerial creatures, and the animals, both wild and

minute Vāch Virāj" (comp. R. V. viii 90, 16, "The goddess Vāch . . . the cow, who has come from the gods") Again in viii. 9, 1 . . . "The two calves of Virāj rose out of the water. 2 . . . The desire-bestowing calf of Virāj" It is shortly afterwards (v 7) strangely said that Virāj, though spoken of in the feminine gender, is the *father of brahman*, whether that mean the deity or devotion. "They say that Virāj is the father of devotion. Bring her to us thy friends in as many forms (as thou canst . . . 8 She whom, when she advances, sacrifices follow, and stand still when she stands; she, by whose will and energy the adorable being moves, is Virāj in the highest heaven. 9. Without breath, she moves by the breath of breathing females. Virāj follows after Svārāj," etc. The calf of Virāj is mentioned again in xiii. 1, 33. In vii. 10, 1, it is said of her: "Virāj was formerly all this [universe]. Every king was afraid of her when she was born, lest she herself should become this. 2 She ascended. She entered the Gārhapatya fire. He who knows this becomes master of the house," etc. And in ix 10, 24, we read "Virāj is Vāch, is the earth, and the air, is Prajapati, is Death, the ruler of the Sādhyas," etc. In reading these passages we should bear in mind the great power attributed by the Vedic writers to hymns and metres. See Weber's Ind. Stud. vii: 8 12, and Sanskrit Texts, iii 172 ff. On the virtues of the Virāj in particular, see Weber, as above, pp 56 ff. In the following texts the word may be a masculine name or an epithet. A. V. xi. 5, 16. "The acārya is a brahmachārin, the brahmachārin is Prajapati. Prajapati shines (vi rajati). He becomes the resplendent, powerful Indra." So also in iv 11, 7; xii. 3, 5, xi. 5, 7, and viii. 5, 10, where Virāj precedes or follows the words Prajapati and Parameshthin. In xi 4, 12, Virāj is identified with Prāṇa. In the Bṛhad Ār. Up. Virāj is called the wife of Purusha. (See p. 217 of Dr. Roer's translation).

¹ In the Bhāgavata Purāṇa, ii. 6, 15 ff. the preceding verses of our hymn are paraphrased as follows: "Purusha himself is all this which has been, shall be, and is. By him this universe is enveloped, and yet he occupies but a span. That Prāṇa (explained by the commentator as the sun), while kindling his own sphere, kindles also that which is without it. So too Purusha, while kindling Virāj, kindles whatever is within and without him. He is the lord of immortality and security, since he has transcended mortal nutriment. Hence, O Brahman, this greatness of Purusha is unsurpassable. The wise know all things to exist in the feet [or quarters] of Purusha, who has the worlds for feet [or quarters] immortality, blessedness, and security, abide in the heads of the three-headed. Three quarters, viz., the woods of ascetics, are beyond the three worlds, while the remaining quarter, the abode of householders who have not adopted a life of celibacy, is within them. Purusha has traversed both the two separate paths, that of enjoyment and abstinence, that is, of ignorance and knowledge, for he is the receptacle of both. From him was produced an egg, consisting of the elements and senses, and three qualities. Purusha penetrated through its entire substance, as the sun warms with his rays."

There is a good deal about Purusha in the Bṛhad Āraṇyaka Upanishad. See pp. 217, 220-228, 233, 250, 252, 267, of Dr. Roer's Eng. transl.

tame. 9. From that universal sacrifice sprang the hymns called *rich* and *sāman*, the metres, and the *yajus*. 10. From it were produced horses, and all animals with two rows of teeth, cows, goats, and sheep. 11. When they divided Purusha, into how many parts did they distribute him? What was his mouth? What were his arms? What were called his thighs and feet? 12. The Brāhman was his mouth; the Rājanya became his arms; the Vaiśya was his thighs; the Śūdra sprang from his feet. 13. The moon was produced from his soul (*manas*); the sun from his eye; Indra and Agni from his mouth; and Vāyu from his breath. 14. From his navel came the atmosphere; from his head arose the sky; from his feet came the earth; from his ear the four quarters: so they formed the worlds. 15. When the gods in performing their sacrifice bound Purusha as a victim, there were seven pieces of wood laid for him round the fire, and thrice seven pieces of fuel employed. 16. With sacrifice the gods worshipped the Sacrifice. These were the first rites. These great beings attained to the heaven where the gods, the ancient Sādhyas, reside."

There are two other hymns of the R. V. besides the Purusha Sūkta in which the Deity is represented as either the agent, the object, or the subject of sacrifice. In x. 81, 5, Viṣvakarman is said to sacrifice himself, or to himself; and in verse 6, to offer up heaven and earth. And in x. 130 (where, in verse 2, Puman may be equivalent to Purusha) it is said (verse 3) either that the gods sacrificed to the [supreme] god, or that they offered him up.¹

In the Nirukta, x. 26,² a legend, having reference to R. V. x. 81, is quoted to the effect that Viṣvakarman, the son of Bhuvana, first of all offered up all worlds in a *sarvamedha*,

¹ The rendering in these passages depends on the exact sense assigned to the word *yaj*. See Sanskrit Texts, iv. 7-9.

² Ibid., p. 7. In the S. P. Br. xi. 1, 8, 2, it is said that "Prajāpati gave himself to the gods, and became their sacrifice. For sacrifice is the food of the gods. He then created sacrifice as his own image (or counterpart). Hence they say that 'Prajāpati is sacrifice;' for he created it as his own image." In the M. Bh. Śāntip. 9616, also, it is said that Prajāpati formed the sacrificial victims, and sacrifice itself, and with it worshipped the gods. The S. P. Brāhmana says, elsewhere, xiv. 3, 2, 1, "This which is sacrifice is the soul of all bodies and of all gods."

and ended by sacrificing himself. And in the Śatapatha Brāhmaṇa, xiii. 7, 1, 1, the same thing is related of the self-existent Brahma himself, who, finding that he could not by rigorous abstraction (*tapas*) attain to the infinitude which he desired, resolved to offer up himself in created things, and created things in himself, and having done this, attained to pre-eminence, self-effulgence, and supreme dominion. It is evident that the author of this passage had not attained to that clear conception of the self-sufficiency and omnipotence of a self-existent Being which later Indian writers acquired.¹

In the hymn before us the gods are distinctly said (in vv. 6, 7, and 15) to have offered up Purusha himself as a victim. And in the Bhāgavata Purāṇa, ii. 6, 21-26,² which is a paraphrase of this passage, Brahmā is made to say that he derived the materials of sacrifice from Purusha's members, and immolated that being, the lord himself.

It is not very easy to seize the precise idea which is expressed in the latter part of this singular hymn, the Purusha Sūkta. It was evidently produced at a period when the ceremonial of sacrifice had become largely developed, when great virtue was supposed to reside in its proper celebration, and when a mystical meaning had come to be attached to the various materials and instruments of the ritual as well as to the different members of the victim. Penetrated with a sense of the sanctity and efficacy of the rite, and familiar with all its details, the priestly poet to whom we owe the hymn has thought it no profanity to represent the supreme Purusha himself as forming the victim, whose immolation by the agency of the gods gave birth by its transcendent power to the visible universe and all its inhabitants.³

¹ The word *svayambhū* does not, however, always signify self-existence in the absolute sense. Thus Kaṣyapa is in A.V. xix. 53, 10, called *svayambhū*, and is yet said to have sprung from *Kala* (time).

² See Sanskrit Texts, iv. p. 9.

³ Dr Haug, when treating of the importance attached to sacrifice by the Brahmins, remarks (Pref. to Ant. Br. p. 73) "The creation of the world itself was even regarded as the fruit of a sacrifice performed by the Supreme Being." If the learned author here refers to the Purusha Sūkta it would have been more exact to say that the creation was regarded as the fruit of an immolation of the Supreme Being. But his remark may be justified by the other passages I have cited.

The two following verses in the *Vājasanayi Saṁhitā* refer to Puruṣa :

xxxi. 18 (= *Śvetāśvatara Upanishad*, iii. 8). "I know this great Puruṣa, resplendent as the sun, above the darkness. It is by knowing him that a man overpasses death. There is no other road to go."¹ (The Puruṣa Sūkta occupies verses 1-16 of the same section in which this verse is found.)

xxxii. 2. "All winkings of the eye have sprung from Puruṣa, the resplendent. No one has embraced him either above, or below, or in the middle."²

The A. V. contains a long hymn (x. 2) on the subject of Puruṣa, which does not throw much light on the conception of his character, but contains a number of curious ideas. The Deity being conceived and described in this hymn as the Man, or Male (Puruṣa)—the great archetype and impersonation of that active energy of which men are the feeble representatives upon earth—the poet has been led to imagine the object of his adoration as invested with a visible form, and with members analogous to those of the human frame; and he then goes on to speculate on the agency by which the different portions of Puruṣa's body could have been constructed, and the source from which he could have derived the various attributes through which he formed the universe and ordained the conditions under which its several departments exist. The minute questions regarding the members of Puruṣa with which the hymn opens may have been suggested to the author by an observation of the curious structure of the human body, and by the wonder which that observation had occasioned. Throughout the hymn Puruṣa is not represented as a self-existing, self-sufficient Being, but as dependent on other gods for his various powers and attributes. The details are too tedious, and in some places too obscure, to admit of my giving them in full, but I shall state the

¹ Comp. A. V. vii. 53, 7. "Ascending from the darkness to the highest heaven, we have reached the sun, a god among the gods, the uppermost light."

² The following verse given in the *Nirukta* ii. 3, is from the *Śvetāśvatara Upanishad*, iii. 9. "This entire universe is filled by that Puruṣa to whom there is nothing superior, from whom there is nothing different, than whom no one is more minute or more vast, and who alone, fixed like a tree, abides in the sky."

substance, and adduce the most important parts more or less in extenso. The hymn begins thus :

"1. By whom were the heels of Purusha produced ? by whom was his flesh brought together ? by whom were his ancles, by whom were his fingers and his muscles, made ? by whom the apertures of his body ? . . . 2. From what did they construct his ancles below and his knees above ?" After similar questions about his legs, thighs, trunk, etc., the author proceeds : "4. How many and who were the gods who joined together the chest and the neck of Purusha ? how many formed his breasts, who his elbows ? (?) how many connected his shoulders, and ribs ? . . . 6. Who opened the seven apertures in his head, these ears, nostrils, eyes, and mouth ? . . ." "Whence," asks the poet (v. 9), "does Purusha bring many things pleasant and unpleasant, sleep, fear, fatigue, and various kinds of enjoyments ? 10. How do suffering, distress, evil, as well as success and opulence, exist in Purusha ? . . . 12. Who assigned to him form,¹ magnitude, name,¹ motion, and consciousness, (13) and the different vital airs ? 14. What god placed in him sacrifice, truth, and falsehood ? Whence come death and immortality ? 15. Who clothed him with a garment ? who created his life ? who gave him strength and speed ? 16. Through whom did he spread out the waters, cause the day to shine, kindle the dawn, bring on the twilight ? 17. Who placed in him seed, that the thread (of being) might be continued ? who imparted to him understanding ? . . . 18. Through whom did he envelop the earth, surround (or transcend) the sky, surpass by his greatness the mountains and all created things ? . . . 24. By whom was this earth made, and the sky placed above ? By whom was this expanse of atmosphere raised aloft and stretched across ? 25. The earth was made by Brahma, and Brahma is placed above as the sky. Brahma is the expanse of atmosphere raised aloft and stretched across. 26. When Atharvan joined together the head and the heart [of Purusha], air issued upwards from the brain in his head (?). 27. That head of Atharvan [is] a

¹ Here, as above noticed, we have the *nāma* and *rūpa* of the Vedantists.

divine receptacle, closed up. Breath guards this head, and so do food and mind. 28. Purusha has pervaded all the regions which are extended aloft and across. He who knows the city (*pur*) of Brahma from which *Purusha* is named, (29) who knows that city of Brahma, invested with immortality, to him Brahma and Brahma's offspring have given sight, and breath, and progeny. 30. Neither sight nor breath abandons before [the term of natural] decay the man who knows the city of Brahma from which *Purusha* is named. 31. Within that impregnable city of the gods, which has eight circles (compare A.V. xi. 4, 22) and nine gates, there exists a golden receptacle, celestial, invested with light. 32. Those acquainted with Brahma (divine science, or the Deity) know that living (*âtmanvat*) object of adoration which resides in this golden receptacle with three spokes, and triple supports.¹ 33. Brahma has entered into the impregnable golden city, resplendent, bright, invested with renown."

In the Ś. P. Br. xiii. 6, 1, 1 (see Sansk. Texts, iv. 25) the word *Nârâyaṇa* is coupled with *Purusha*, and it is said that this Being desired to surpass all beings, and become himself the entire universe, and that he accomplished his object by celebrating the *Sarvamedha* sacrifice. *Purusha Nârâyaṇa* is again mentioned in the same *Brâhmaṇa* (xii. 3, 4, 1) as receiving instruction from *Prajâpati*: "*Prajâpati* said to *Purusha Nârâyaṇa*, 'Sacrifice, sacrifice.' He replied, 'Thou sayest to me, Sacrifice, sacrifice. I have sacrificed thrice. By the morning oblation the *Vasus* came, by the mid-day oblation the *Rudras* came, and by the third oblation the *Âdityas* came to my place of sacrifice, where I was.' *Prajâpati* rejoined, 'Sacrifice; I will tell thee how thy hymns shall be strung like a gem on a thread, or as a thread in a gem.'"

¹ One line of A. V. x. 8, 43, is identical with one line of this verse, though the other line is different. The whole runs thus. "The knowers of *brahma* know that living object of adoration which resides in the lotus with nine gates, invested with the three qualities" (*tribhir guṇebhir dēyam*). Roth, s.v. *guṇa*, translates the last three words by "triply enveloped," and refers in support of this sense to vv. 29 and 32 of the hymn before us, and to *Chhândogya Upanishad*, viii. 1, 1. It is possible, however, that there may be here a first reference to the three *guṇas* afterwards so celebrated in Indian philosophical speculation.

SKAMBHA.

In the following hymn of the A.V. (x. 7) the Supreme Deity appears to be celebrated under the appellation of Skambha (or Support). Though it is rather tedious, I shall translate it nearly in full, as these ancient guesses after truth no doubt contain the germ of much of the later speculation on the same topics. In the first part (vv. 1-6, 10-12) Skambha is considered (like Purusha, with whom he seems to be identified, v. 15), as a vast embodied being, co-extensive with the universe, and comprehending in his several members not only the different parts of the material world, but a variety of abstract conceptions, such as austere meditation (*tapas*), faith, truth, and the divisions of time. He is distinct from, and superior to, Prajâpati, who founds the worlds upon him (vv. 7, 8, 17). The thirty-three gods are comprehended in him (vv. 13, 22, and 27), and arose out of nonentity, which forms his highest member, and, as well as entity, is embraced within him (vv. 10, 25). The gods who form part of him, as branches of a tree (v. 38), do him homage, and bring him tribute (v. 39). He is identified with Indra (in vv. 29 and 30); and perhaps also with the highest Brahma who is mentioned in vv. 32-34, 36, and in the first verse of the next hymn, x. 8, 1. In verse 36, however, this Brahma is represented as being born (or, perhaps, developed) from toil and *tapas*, whilst in x. 8, 1, the attributes of the Supreme Deity are assigned to him. In compositions of this age, however, we are not to expect very accurate or rigorous thinking, or perfect consistency.

"1. In what member of his does rigorous abstraction (*tapas*) stand? in which is the ceremonial (*rita*) contained? In what parts do religious observance (*vrata*) and faith abide? In what member is truth established? 2. From what member does Agni blaze? from which does Mâtarisvan (the wind) blow [*lit.* purify]? from which does the moon pursue her course, traversing the mighty body of Skambha? 3. In what member does the earth reside? in which the atmosphere? in which is the sky placed,

and in which the space above the sky? 4. Whither tending, does the upward fire blaze? whither tending, does the wind blow? Tell who is that Skambha to whom the paths tend, and into whom they enter. 5. Whither do the half-months, and the months, in concert with the year, proceed? Tell who is that Skambha to whom the seasons and other divisions of the year advance. 6. Whither tending do the two young females of diverse aspects, the day and the night, hasten in unison? Tell who is that Skambha to whom the waters tend and go? 7. Who is that Skambha on whom Prajâpati has supported and established all the worlds? 8. How far did Skambha penetrate into that highest, lowest, and middle universe, comprehending all forms, which Prajâpati created? and how much of it was there which he did not penetrate? 9. How far did Skambha penetrate into the past? and how much of the future is contained in his receptacle? How far did Skambha penetrate into that one member which he separated into a thousand parts? 10. Tell who is that Skambha in whom the waters, divine thought (*brahma*), and men recognize worlds and receptacles [as existing], and within whom are nonentity and entity; (11) in whom rigorous abstraction (*tapas*), energizing, maintains its highest action (*vrata*), in whom the ceremonial, faith, the waters, and divine science are comprehended; (12) in whom, earth, atmosphere, sky, fire, moon, sun, and wind are placed; (13) in whose body all the thirty-three gods are contained;¹ (14) in whom the earliest Rishis, the Rik, the Sâman, the Yajus, the earth, and the one Rishi reside; (15) that Purusha, in whom immortality and death are comprehended; who has the ocean within him as his veins; (16) that Skambha of whom the four regions are the primeval arteries, and in whom sacrifice displays its energy. 17. They who know the divine essence (*brahma*) in Purusha, know Parameshthin. He who knows Parameshthin, and he who knows Prajâpati—they who know the highest divine mystery (*brâhmaṇa*)² know in consequence Skambha. 18. Tell who is that Skambha of whom Vaiṣvânara (Agni) is the head, the Angi-

¹ See Dr. Haug's *Essay on the sacred language of the Parvees*, p. 233.

² See vv. 26, 33, and 37 of A.V. x. 8, to be quoted below.

raises the eye, and the Yātus (demons) are the limbs; (19) of whom, they say, divine knowledge (*brahma*) is the mouth, the Madhukāśā¹ the tongue, and the Virāj the udder, (20) from whom they hewed off the Rik verses, and cut off the Yajus; of whom the Sāma verses are the hairs, and the Atharvāṅgirases (i.e. the Atharvaveda) the mouth.² 21 Men regard the branch of nonentity,³ which is prominent, as if it were paramount; and inferior men, as many as worship thy branch, regard it as an entity. 22. Tell who is that Skambha in whom the Ādityas, Rudras, and Vasus are contained, on whom the past, the future, and all worlds are supported, (23) whose treasure the thirty-three gods continually guard. Who now knows the treasure which ye guard, O gods? 24. In whom, O gods, the knowers of sacred science (*brahma*) worship the highest divine essence (*brahma*). The priest (*brahmā*) who knows these [gods] face to face will be a sage. 25. Mighty indeed are those gods who have sprung from nonentity. Men say that that nonentity is one, the highest, member of Skambha (compare v. 10 above). 26. Where Skambha generating, brought the Ancient (*purāṇa*) into existence, they consider that that Ancient is one member of Skambha, (27) in whose members the thirty-three gods found their several bodies. Some possessors of sacred knowledge know those

¹ I am indebted to Professor Aufrecht for an explanation of this word, and an indication of some passages in which it is mentioned. In R V. i 22, 3, and i. 157, 4, the Āsvins are said to have a hoined whip, *kaṁ madhumatī*, with which they are besought to sprinkle the worshippers, or their sacrifice. The Maruts are also said in R V. i 37, 3, and i. 168, 4, to have whips, though they are not said to be hoined. In the Nighantū, however, the sense of speech is ascribed to *Kaṁ*, and a mystical significance is also assigned to the word *madhu*, honey, which Dādhyanch is said, R V. i. 115, 12, and i. 117, 22, to have made known to the Āsvins. This is explained by Śāyana on these two passages as meaning that he gave them a Brāhmana revealing the Madhuvidyā, and Mahidhara on Vaj. S. 7, 11, understands the *kaṁ madhumatī* as referring to this mystic lore. This Madhukāśa is celebrated at considerable length in A V ix 1, where it is said that she "sprang from the sky, the earth, the air, the sea, fire, and wind," and that "all creatures, worshipping her who dwells in immortality, rejoice in their hearts." In vv. 3, 10, she is said to be the "brilliant granddaughter of the Maruts," and in v. 4, to be the "mother of the Ādityas, the daughter of the Vasus, the life of creatures, and the centre of immortality."

² Compare A. V. ix. 6, 1. "He who clearly knows Brahma, of whom the materials of sacrifice are the joints, the Rik-verses are the backbone, the Sāma-verses the hairs, the Yajus is said to be the heart, and the oblation the covering."

³ The sense of this verse is obscure, and it does not seem to be very closely connected either with what precedes or with what follows. I have adopted partly the rendering suggested by Professor Aufrecht.

thirty-three gods. 28. Men know Hiranyagarbha¹ to be supreme and ineffable. Skambha in the beginning shed forth that gold (*hiranya*, out of which Hiranyagarbha arose) in the midst of the world. 29. In Skambha are contained the worlds, rigorous abstraction, and the ceremonial. Skambha, I clearly know thee to be contained entire in Indra. 30. In Indra are contained the worlds, rigorous abstraction, and the ceremonial. Indra, I clearly know thee to be contained entire in Skambha. 31. (The worshipper) repeatedly invokes the [god who bears the one] name by the name [of the other god] before the sun, before the dawn.² When the unborn first sprang into being, he attained to that independent dominion, than that which nothing higher has ever been. 32. Reverence be to that greatest Brahma, of whom the earth is the measure,³ the atmosphere the belly, who made the sky his head, (33) of whom the sun and the ever-renewed moon are the eye, who made Agni his mouth, (34) of whom the wind formed two of the vital airs, and the Angirases the eye, who made the regions his organs of sense (?) 35. Skambha established both these [worlds], earth and sky, the wide atmosphere, and the six vast regions; Skambha pervaded this entire universe. 36. Reverence to that greatest Brahma who, born from toil and austere abstraction (*tapas*), penetrated all the worlds, who made soma for himself alone.⁴ 37. How is it that the wind does not rest? how is not the soul quiescent? why do not the waters, seeking after truth, ever repose? 38. The great object of adoration [is] absorbed in severe abstraction (*tapas*) in the midst of the world, on the surface of the waters. To him all the gods are joined, as the branches around the trunk of a tree. 39. Say who is that Skambha to whom, on account of his works(?), the gods with hands, feet, voice, ear, eye, present continually an unlimited tribute.⁵ 40. By him darkness is dispelled: he is

¹ See above, p. 344.

² The meaning of this, as suggested by Professor Aufrecht, is that by invoking Indra, the worshipper really worships Skambha.

³ *Pramā*. Compare, however, R.V. x. 130, 3.

⁴ Such is the sense according to Roth, s.v. *kevala*.

⁵ Compare A.V. x. 8, 15 . . . "the great object of adoration in the midst of the world: to him the rulers of realms bring tribute."

free from evil: in him are all the three luminaries which reside in Prajâpati. 41. He who knows the golden reed standing in the waters is the mysterious Prajâpati."¹

I quote in addition some verses from the hymn next in order, A. V. x. 8 :

"1. Reverence to that greatest Brahma who rules over the past, the future, the universe, and whose alone is the sky. 2. These two [worlds], the sky and the earth, exist, supported by Skambha. Skambha is all this which has soul, which breathes, which winks 11. That which moves, flies, stands, which has existed breathing, not breathing, and winking: that omniform (entity) has established the earth; that, combining, becomes one only. 12. The infinite extended on many sides, the infinite, and the finite all around—these two the ruler of the sky proceeds discriminating, knowing the past and the future of this (universe). 13. (= Vāj.-San. 31, 19) Prajâpati moves within the womb. Though unseen, he is born in many forms. With the half [of himself] he produced the whole world. What trace is there of the [other] half of him? 16. I regard as the greatest That whence the sun rises, and That where he sets; That is not surpassed by anything. 20. He who knows the two pieces of firewood from which wealth is rubbed out—he so knowing will understand that which is the greatest; he will know the great divine mystery (*brâhmaṇa*). . . . 34. I ask thee regarding that flower of the waters in which gods and men are fixed as spokes in the nave of a wheel,—where that was placed by [divine] skill (*mâyâ*). . . . 37. He who knows that extended thread on which these creatures are strung, who knows the thread of the thread,—he knows that great divine mystery (*brâhmaṇa*). 38. I know that extended thread on which these creatures are strung. I know the thread of the thread, and hence, too, that which is the great divine mystery. 44. The possessors of divine science (*brahma*) know that living object of adoration within the lotus with nine gates, which is

¹ In the R. V. x. 95, 4, 5 (compare Nirukta in 21), and S. P. Br. xi. 5, 1, 1, the word *cautasa* has the sense of *membrum virile*. Are we to understand the word *colasa* (reed) in the same sense here, as denoting a Langa?

enveloped by the three qualities (*gunas*).¹ 44. Knowing that soul (*ātman*) calm, undecaying, young, free from desire, immortal, self-existent, satisfied with the essence, deficient in nothing, a man is not afraid of death."

BRAHMA.

Some verses in the two preceding hymns speak of the highest, or greatest, Brahma, in whatever sense that term is to be understood.

I am unable to state whether Brahma in the sense of the supreme Deity occurs elsewhere in the Atharva Veda, unless it be in the following passage (xi. 8, 30 ff.): "The waters, the gods, Virāj (*feminine*) with Brahma [entered into man]. Brahma entered his body; Prajāpati [entered] his body. Sūrya occupied the eye, and Vāta the breath of the man. Then the gods gave his other soul to Agni. Wherefore one who knows the man thinks, 'this is Brahma;' for all the gods are in him, as cows in a cowhouse."

In the Vājasaneyi Sanhitā xiii. 47 f. we find the following words: "What light is equal to the sun? what lake is equal to the sea?" To which the following verse gives the answer: "Brahma (neuter) is a light equal to the sun. The sky is a lake equal to the sea." The commentator explains Brahma in this passage as standing either for the three Vedas or the supreme Brahma.

In Ś. P. Br. x. 6, 5, 9, it is stated in a genealogy of teachers that "Tura Kāvasheya sprang from Prajāpati, and Prajāpati from Brahma, who is self-existent." In another passage, already quoted, from the same work (xiii. 7, 1, 1) Brahma (in the neuter), the self-existent, is described as performing *tapas*, and as sacrificing himself. Ibid. x. 4, 19, a verse is quoted from some hymn which begins, "I celebrate the one great imperishable Brahma who was and is to be."

Again, in the same work, xi. 3, 3, 1, the same being is represented as giving over other creatures, except the Brahma-

¹ See note in p. 22.

chârin, or religious student, to death. And in xi. 2, 3, 1 ff., there is another text, which is interesting not merely as introducing Brahma, but as containing what is probably one of the oldest extant expositions of the conception of *nāma* and *rūpa* (name and form) as comprehending the whole of the phenomenal universe. These two words, as is well known, became at a later period technical terms of the Vedānta philosophy. The passage runs as follows :

"In the beginning Brahma was this [universe]. He created gods. Having created gods, he placed them in these worlds, viz. : in this world Agni, in the atmosphere Vāyu, and in the sky Sūrya; and in the worlds which were yet higher he placed the gods who are still higher. Such as are these visible worlds and these gods,—even such were those visible worlds in which he placed those gods, and such were those gods themselves. 2. Then Brahma proceeded to the higher sphere (*parārdhā*—explained by the commentator to mean the Satya-loka, the most excellent, and the limit, of all the worlds). Having gone to that higher sphere, he considered 'How now can I pervade all these worlds?' He then pervaded them with two things, with form and with name. Whatever has a name, that is name. And even that which has no name—that which he knows by its form, that 'such is its form'—that is form. This [universe] is so much as is (i.e. is co-extensive with) form and name. 3. These are the two great magnitudes (*abhyas*) of Brahma. He who knows these two great magnitudes of Brahma becomes himself a great magnitude. 4. These are the two great adorable beings of Brahma. He who knows these two great adorable beings of Brahma becomes himself a great adorable being. Of these two one is the greater, viz. form; for whatever is name is also form. He who knows the greater of these two becomes greater than him than whom he wishes to become greater. 5. The gods were originally mortal, but when they were pervaded by Brahma they became immortal. By that which he sends forth from his mind (mind is form; for by mind he knows, 'This is form')—by that, I say, he obtains form. And by that which he sends out from his voice (voice is name; for by

voice he seizes name)—by that, I say, he obtains name. This universe is so much as is (i.e. is co-extensive with) form and name. All that he obtains. Now that all is undecaying. Hence he obtains undecaying merit, and an undecaying world."

Compare with this the passages of the Bṛhad Āraṇyaka Upanishad, which will be found at pp. 75 ff. and 165 ff. of Dr. Roer's translation (Bibliotheca Indica, vol. ii. part 3); and the Muṇḍaka Upanishad, iii. 2, 8, p. 164, of English version.

Brahma is also mentioned in the following texts of the Taittiriya Brāhmaṇa:—ii. 8, 8, 9. "Brahma generated the gods. Brahma [generated] this entire world. From Brahma¹ the Kṣhattriya is formed. Brahma in his essence (*ātman*) is the Brāhman.² Within him are all these worlds; within him this entire universe. It is Brahma who is the greatest of beings. Who can vie with him? In Brahma the thirty-three gods,—in Brahma, Indra and Prajāpati,—in Brahma all beings are contained, as in a ship." Again, it is said (iii. 12, 3, 1), "Let us worship with oblations the first born god, by whom the entire universe which exists is surrounded,—the self-existent Brahma who is the supreme austerity (*tapas*). It is he who is son, he who is father, he who is mother. Tapas came into existence, the first object of worship." Compare Taitt. Br. ii. 8, 9, 6 (quoted above, p. 343), in which Brahma is said to be the forest and the tree out of which the worlds were constructed, and as the basis on which the creator took his stand when upholding the universe.

PRAJĀPATI.

As I have observed above (p. 341), the word *prajāpati*, "lord of creatures," was originally employed as an epithet of Savitr and Soma, as it also was of Hiranyagarbha (R.V. x. 121, 10). It afterwards, however, came to denote a separate deity, who appears in three places of the Rig-veda (x. 85, 43; x. 169, 4;

¹ Here there is an allusion to the other sense of *brāhms* as the Brahman caste.

² "For," says the commentator, "in the Brahman's body the supreme Brahma is manifested."

x. 184, 4) as the bestower of progeny and cattle. This god is also mentioned in the Vajasaneyi Sanhitā, in a verse (xxxii. 19) which comes in after one in which the great Purusha is celebrated (see above, pp. 353, 365). The verse is as follows: "Prajāpati works within the womb. Though he does not become born, he is yet born in many shapes. The wise behold his womb. In him all the worlds stand."¹ Another verse in which he is referred to is this (xxxii. 5): "He before whom nothing was born, who pervades all worlds, Prajāpati, rejoicing in his offspring, dwells in the three luminaries, as the sixteenth."

Prajāpati is frequently alluded to in the A. V. Several of these passages have been already cited above, as x. 7, 7, 17, 40, 41; x. 8, 13. Some of the others which I have observed are the following: In xi. 3, 52, he is said to have formed thirty-three worlds out of the oblation of boiled rice (*odana*). In xi. 4, 12, he is identified with *Prāna*, or breath. In xi. 5, 7, he is said, along with Parameshthin, to have been generated by the Brahmachârin, or religious student. In xi. 7, 3, he is declared to exist in the *Uchhishta*, or remnant of the sacrifice. And in xix. 53, 8, 10, he is said to have been produced by *Kāla*, or time. Most of these passages will be quoted at length further on. It will be seen that in this Veda he is not generally regarded as the supreme or primal deity.

On the subject of Prajāpati, I have elsewhere (Sanskrit Texts, iii. 3; iv. 19-24, and 47-51) brought together a considerable number of passages from the Ś. P. Br., of which I shall here only repeat the substance, adding any further notices which occur elsewhere. Prajāpati is sometimes identified with the universe, and described (in the same way as Brahma, or entity, or nonentity are in other places) as having alone existed in the beginning, as the source out of which the creation was evolved, Ś. P. Br. ii. 2, 4, 1; vii. 5, 2, 6;² xi.

¹ The first half of this verse, as we have seen, is also found in the A. V. x. 8, 13, with the different reading of *adriṣyamānah*, "not being seen," for *apriyamānah*, "not being born." The second line runs thus in the A. V. "With the half he produced the whole world. But what trace is there of his [other] half?"

² Ś. P. Br. vii. 5, 2, 6. *Prajapati* was at first this [universe]. Being alone he desired, "May I create food, and become reproduced." He fashioned animals from his breath, man (*purusha*) from his soul (*manas*), the horse from his eye, the cow from his breath, the sheep from his ear, the goat from his voice. Inasmuch as he

5, 8, 1. In other texts, however, he is not represented as the source of creation, but only as one of the subsequent and subordinate agents, created by the gods (vi. 1, 1, 1 ff.), or as springing out of an egg generated by the primeval waters (xi. 1, 6, 1 ff.). He is elsewhere said to have offered sacrifice in order to produce the creation (ii. 4, 4, 1), or to have been himself half mortal and half immortal (x. 1, 3, 2; x. 1, 4, 1), mortal in his body, but immortal in his breath, or to have performed *tapas* for a thousand years, to get rid of sin or suffering (*pāpman*, x. 4, 4, 1).

Prajāpati may thus be said to have two characters, which, however, are not kept distinct in the Brāhmaṇa. On the one hand, he is the result of one of the efforts of the Indian intellect to conceive and express the idea of deity in the abstract, as the great first cause of all things; while, on the other hand, when the writer begins to describe the manner in which the creative activity of the god is manifested, he at once invests him with a mythological character, and even treats him as only one of the thirty-three deities (as in Ś. P. Br. xi. 6, 3, 5. See my former Art. p. 61; and Roth's *Lex. s.v.* Prajāpati). In the Brāhmaṇa itself (xiv. 1, 2, 18) we have the following text, which expresses two different aspects under which the god was regarded, though, perhaps, these are not identical with the two points of view which I have stated: "Prajāpati is this sacrifice. Prajāpati is both of these two things, declared and undeclared, measured and unmeasured. Whatever he (the priest) does with the Yajus text, with that he consecrates that form of Prajāpati which is declared and measured. And what he (the priest) does silently, with that he consecrates the form of Prajāpati which is undeclared and unmeasured."

PRĀṆA.

A great variety of other deities of the most heterogeneous character are celebrated in the Atharva Veda as the possessors

created these (animals) from his breath, they say that 'the breaths are the animals.' The soul (*manas*) is the first of the breaths; and since he fashioned man from his soul, they say that 'man is the first and strongest of the animals.' The soul is all the breaths, for they are all supported in it. since then he fashioned man from the soul, they say, 'man is all the animals,' for they are all his."

of divine power. One of these is *Prâṇa*, life or breath, to whom a hymn (xi. 4) is dedicated, of which the following is a specimen :—

"Reverence to *Prâṇa*, to whom this universe is subject; who has become the lord of all, on whom all is supported. 2. Reverence, *Prâṇa*, to thy shout, to thy thunder, to thy lightning, and to thyself when thou rainest. 3. When *Prâṇa* calls aloud to the plants with thunder, they are impregnated, they conceive, they produce abundantly. 4. When the season has arrived, and *Prâṇa* calls aloud to the plants, then everything rejoices which is upon the earth. 5. When *Prâṇa* has watered the great earth with rain, then the beasts rejoice, and [think] that they shall have strength. 6. When watered by *Prâṇa*, the plants burst forth [saying], 'Thou hast prolonged our life, thou hast made us all fragrant.' 7. "Reverence to thee, *Prâṇa*, coming, and to thee going, and to thee standing, and to thee sitting. . . . 9. Communicate to us thy dear form, thy dearest, with thy healing power, that we may live. 10. *Prâṇa* clothes the creatures, as a father his dear son. *Prâṇa* is the lord of all, both of what breathes and what does not breathe. 11. *Prâṇa* is death, *Prâṇa* is fever. The gods worship *Prâṇa*. *Prâṇa* places the truth-speaker in the highest world. 12. *Prâṇa* is *Virâj*, *Prâṇa* is *Deshtîri*. All worship *Prâṇa*. *Prâṇa* is sun and moon. They call *Prajâpati*, *Prâṇa*. . . . 15. They call *Mâtariṣvan*, *Prâṇa*; the Wind is called *Prâṇa*. The past, the future, everything is supported upon *Prâṇa*. 16. The plants of *Atharvan*, of *Angiras*, of the gods, and of men, grow when thou, *Prâṇa*, quickenest. . . . 18. Whoever, O *Prâṇa*, knows this [truth regarding] thee, and on what thou art supported—all will offer him tribute in that highest world. 19. As, O *Prâṇa*, all these creatures offer thee tribute, so shall they offer tribute in that highest world to him who hears thee with willing ears."

ROHITA.

Robita, probably a form of Fire and of the Sun (though he is also distinguished, in the hymn I am about to quote, from both these gods), is another deity who is highly celebrated in

the A. V., where one hymn (xiii. 1) and parts of others are appropriated to his honour. The following are some of the verses in which his power is described :—xiii. 1, 6. "Rohita produced heaven and earth : there Parameshthin stretched the web. There Ajâ Ekapâda was contained. He established heaven and earth by his force. 7. Rohita established heaven and earth : by him the sky was supported, by him the heaven. By him the atmosphere, by him the regions were meted out. Through him the gods obtained immortality. . . . 13. Rohita is the generator, and the mouth, of sacrifice. To Rohita I offer my oblation with voice, ear, and mind. To Rohita the gods resort with gladness. . . . 14. Rohita offered a sacrifice to Viṣvakarman. From it may these fires approach me. . . . 25. The gods frame creations out of that Rohita who is a sharp-horned bull, who surpasses Agni and Sûrya, who props up the earth and the sky. . . . 37. In Rohita, who is the conqueror of wealth and cows, . . . the heaven and earth are sustained. . . . 55. He first became the sacrifice, both past and future. From him sprang all this whatever there is which shines, developed by Rohita the rishi."

In the second hymn of the same book, in which the sun is celebrated, Rohita is also named in the following verses :— "39 ff. Rohita became Time; Rohita formerly became Prajâpati. Rohita is the mouth of sacrifices. Rohita produced the sky. 40. Rohita became the world; Rohita shone beyond the sky; Rohita traversed the earth and [aerial ?] ocean with his rays. 41. Rohita traversed all the regions. Rohita is the ruler of the sky. He preserves heaven, ocean, and earth—whatever exists."

And yet the gods are said to have generated Rohita (A. V. xiii. 3, 12, 23).

UCHHISHTA.

In the hymn which follows divine power is ascribed to the remains of the sacrifice (Uchhishta):

A. V. xi. 7, 1. "In the Uchhishta (remains of the sacrifice) are contained name, form,¹ the world, Indra and Agni, the

¹ See verse 12, of the hymn to Purusha, A. V. x. 2, above.

universe, (2) heaven and earth, all that exists, the waters, the sea, the moon, and the wind. In the Uchhishta are both the existent and the non-existent (*san, asamścha*, masc.), death, food (or strength, *śāpa*), Prajāpati . . . 4. . . Brahma,¹ the ten creators of all things, the gods, are fixed on all sides to the Uchhishta as [the spokes] of a wheel to the nave." So, too, the Rik, Sāman, Yajus, the hymns, the different sorts of sacrifices, and parts of the ceremonial, etc., are comprehended in it (vv. 5-13). "14. Nine earths, oceans, skies (?), are contained in the Uchhishta. The sun shines in the Uchhishta, and in the Uchhishta are day and night. 15. The Uchhishta (masc.), the sustainer of the universe, the father of the generator, upholds the . . . *upaharya*, and the sacrifices which are secretly presented. 16. The Uchhishta, the father of the generator, the grandson of spirit (*asu*), the progenitor, the ruler, the lord of the universe, the bull, rules triumphant (?) over the earth. 17. Ceremonial, truth, rigorous abstraction, dominion, effort, righteousness and works, past, future, strength, prosperity, force, reside in the Uchhishta, which is force (comp. x. 7, 1, above). . . . 20. In the Uchhishta are embraced the resounding waters, thunder, the great *gruti* (veda?), pebbles, sand, stones, plants, grass, (21) clouds, lightnings, rain. . . . 23. From the Uchhishta sprang whatever breathes and sees, with all the celestial gods, (24) the Rich and Sāman verses, metres, Purāṇas, and Yajus, . . . two of the vital airs (*prāṇa* and *apāna*), the eye, the ear, imperishableness, perishableness, (26) pleasures, enjoyments, (27) the Pitris, men, Gandharvas, and Apsarases." (Comp. A. V. xi. 3, 21.)

SACRIFICIAL IMPLEMENTS.

Similar divine powers are ascribed to different sacrificial implements in A. V. xviii. 4, 5: "The ladle (*juhū*) has established the sky, the ladle (*upabhr̥t*) the atmosphere, and the ladle (*dhruvā*) the stable earth."

ANUMATI.

In a hymn to Anumati (according to Prof. Roth the god-

¹ Are these the ten Maharshis mentioned by Manu i. 34 f.? In A. V. xi. 1, 1, 3, mention is made of the seven Rishis, the makers of all things (*bhūta-kṛtāḥ*). See also A. V. xii. 1, 39.

ness of good will, as well as of procreation), A.V. vii. 20, she is thus identified with all things (v. 6): "Anumati was all this [universe], whatever stands or walks, and everything that moves. May we, O goddess, enjoy thy benevolence; for thou, Anumati, dost favour us (*anumansase*)."

THE OX, OR KETTLE.

In A.V. iv. 11, 1, a divine power is ascribed to the "Ox," which, however, Professor Aufrecht thinks can only be regarded as a metaphorical ox, as it has an udder (v. 4), and gives milk; and he supposes a kettle with four legs, the *Gharma*, to be intended. As that vessel was used for boiling milk and other materials for sacrificial purposes, the allusions in this hymn to milk become intelligible; and possibly the four-legged kettle may by its form have suggested the figure of an ox.

"The ox has established the earth and the sky; the ox has established the broad atmosphere; the ox has established the six vast regions; the ox has pervaded the entire universe. 2. The ox is Indra. He watches over the beasts. As Śakra he measures the threefold paths. Milking out the worlds, whatever has been or shall be, he performs all the functions of the gods. 3. Being born as Indra among men, the kindled and glowing kettle works. . . . 5. That which neither the lord of the sacrifice nor the sacrifice rules, which neither the giver nor the receiver rules, which is all-conquering, all-supporting, and all-working (*viśvakarmā*),—declare to us the kettle, what quadruped it is."

THE BRAHMACHÂRIN.

The hymn to be next quoted ascribes very astonishing powers to the Brahmachârin, or religious student. Some parts of it are obscure, but the translation I give, though imperfect, will convey some idea of the contents:—

A.V. xi. 5, 1: "The Brahmachârin works, quickening both worlds. The gods are united in him. He has established the earth and the sky. He satisfies his *âchârya* (religious teacher) by *tapas*. 2. The Fathers, the heavenly hosts, all the gods separately follow after him, with the 6333 Gandharvas.

He satisfies all the gods by *tapas*. 3. The *āchārya* adopting him as a disciple, makes him a *brahmachārin* even in the womb, and supports him there for three nights. When he is born the gods assemble to see him. 4. This piece of fuel is the earth (compare v. 9), the second is the sky, and he satisfies the air with fuel.¹ The *brahmachārin* satisfies the worlds with fuel, with a girdle, with exertion, with *tapas*. 5. Born before divine science (*brahma*) the *brahmachārin*, arose through *tapas*, clothed with heat. From him was produced divine knowledge (*brāhmaṇa*), the highest divine science (*brahma*),² and all the gods, together with immortality. 6. The *Brahmachārin* advances, lighted up by fuel, clothed in a black antelope's skin, consecrated, long-bearded. He moves straightway from the eastern to the northern ocean, compressing the worlds, and again expanding them. 7. The *Brahmachārin*, generating divine science, the waters, the world, *Prajāpati*, *Parameshthin*, *Virāj*, having become an embryo in the womb of immortality, having become *Indra*, crushed the *Asuras*. 8. The *Āchārya* has constructed both these spheres, broad and deep, the earth and the sky. The *Brahmachārin* preserves them by *tapas*. In him the gods are united. 9. It was the *Brahmachārin* who first produced this broad earth and the sky as an alms. Making them two pieces of fuel (compare v. 4), he worships. In them all creatures are contained. 10. The two receptacles of divine knowledge (*brāhmaṇa*) are secretly deposited, the one on this side, the other beyond, the surface of the sky. The *Brahmachārin* guards them by *tapas*. Wise, he appropriates that divine knowledge as his exclusive portion. . . . 16. The *Brahmachārin* is the *Āchārya*, the *Brahmachārin* is *Prajāpati*; *Prajāpati* shines (*virājati*); the shining (*Virāj*) became *Indra*, the powerful. 17. Through

¹ See *Āyvalāyana's Gṛhya Sūtras*, ed. Stenzler, pp. 12 ff., where the initiation of the *Brahmachārin*, or religious student, is described. Part of the ceremony is that he throws fuel (*samiddhi*) on the fire, which he invokes with texts. This ritual is probably alluded to in the hymn before us.

The *Brahmachārin* is also mentioned in R. V. x. 109, 5, where he is said to be one member of the gods (*sa devanam bhavati ekam angam*).

² The words *brahma jyeṣṭham* appear here to denote divine knowledge. As employed in A. V. x. 7, 32 ff., and x. 8, 1, they appear to designate a personal being. See above.

self-restraint (*brahmacharyya*, i.e. the life of a *brahmachârin*) and *tapas* a king protects his dominions. Through self-restraint an Âchârya seeks after a Brahmachârin. 18. By self-restraint a damsel obtains a young man as her husband. By self-restraint an ox and a horse seek to gain fodder. 19. By self-restraint and *tapas* the gods destroyed death. By self-restraint Indra acquired heaven from [or, for] the gods. 20. Plants, whatever has been, whatever shall be, day and night, trees, the year, with the seasons, have been produced from the Brahmachârin. 21. Terrestrial and celestial beings, beasts both wild and tame, creatures without wings and winged, have been produced from the Brahmachârin. 22. All creatures which have sprung from Prajâpati have breath separately in themselves; all of these are preserved by divine knowledge (*brahma*), which is produced in the Brahmachârin. . . . 26. These things the Brahmachârin formed; on the surface of the water he stood performing *tapas*¹ in the sea.”

The Taittirîya Brâhmaṇa (iii. 10, 11, 3) tells a story illustrative of the great virtue ascribed to *brahmacharyya*, or religious self-restraint: “Bharadvâja practised *brahmacharyya* during three lives. Indra, approaching him when he was lying decayed and old, said: ‘Bharadvâja, if I should give thee a fourth life, what wilt thou do with it?’ He answered, ‘I will use it only to practise *brahmacharyya*.’ He showed him three objects, as it were unknown, in the shape of mountains. From each of these he took a handful. He said, addressing him, ‘Bharadvâja, these are the Vedas: the Vedas are infinite. This is what thou hast studied during these three lives. But other things have remained unstudied by thee. Now learn this (Agni Sâvitra). This is universal knowledge.’ ”

KÂMA.

We have already seen above, that in R.V. x. 129, 4, desire is said to have been the first movement that arose in the One after it had come into life through the power of fervour, or abstraction. This Kâma, or desire, not of sexual

¹ Compare A.V. x. 7, 38, quoted above.

enjoyment, but of good in general, is celebrated in the following curious hymn (A. V. ix. 2) as a great power, superior to all the gods; and is supplicated for deliverance from enemies. Desire, as the first step towards its own fulfilment, must be considered as here identified with successful desire, or with some deity regarded as the inspirer and accomplisher of the wishes of his votaries:¹

"1. With oblations of butter I worship Kâma,² the mighty slayer of enemies. Do thou, when lauded, beat down my foes by thy great might. 2. The sleeplessness which is displeasing to my mind and eye, which harasses and does not delight me, that sleeplessness I let loose upon my enemy. Having praised Kâma, may I rend him. 3. Kâma, do thou, a fierce lord, let loose sleeplessness, misfortune, childlessness, homelessness, and want, upon him who wishes us evil. 4. Send them away, Kâma, drive them away: may they fall into misery, those who are my enemies. When they have been hurled into the nethermost darkness, do thou, Agni, burn up their dwellings. 5. That daughter of thine, Kâma, is named the Cow which sages call Vâch Virâj. By her drive away my

¹ In A. V. iii. 29, 7, some light is thrown upon the process by which Kâma came to be regarded as a deity. We there read "Who hath given this, and to whom?" Kâma has given it to Kâma (i.e. the inspirer, or fulfiller, of desire, has given it to desire). Kâma is the giver (i.e. the inspirer, or fulfiller, of desire); Kâma is the receiver. Kâma has entered into the ocean. Through Kâma I receive thee, Kâma, this is thine." The allusion here made to Kâma entering the ocean recalls the fact that Agni is often said to be produced from or exist in the waters (R. V. i. 23, 23, x. 2, 7, x. 91, 3, x. 91, 6 A. V. i. 33, 1). And in A. V. iii. 21, 4, Kâma is distinctly identified with Agni. "The god (Agni), who is omnivorous, whom they call Kâma, whom they call the giver and the receiver, who is wise, strong, pre-eminent, unequalled," &c. In some parts of the hymn before us (A. V. ix. 2) the same identification of Kâma with Agni appears to be made. Thus in v. 1, Kâma, and in v. 3, Kâma and other gods, are said to be worshipped with *ghṛta* (butter), an oblation especially appropriate to Agni. In vv. 4 and 9, Agni is called upon to burn the dwellings of the worshipper's enemies, whom Kâma had just been besought to destroy. Again, in v. 26, the auspicious bodies, or manifestations (*taneśh*) of Kâma are referred to just as those of Agni are in other hymns, (as R. V. x. 19, 4, A. V. xviii. 4, 10, comp. Vâj. S. xvi. 2). On the other hand, however, Agni is specified separately from Kâma in v. 6, and in v. 24, Kâma is represented as superior to Agni, as well as to Vâta, Surva, and Chandrama (the moon). In v. 9, Indra and Agni are mentioned along with Kâma, though the verb with which these gods are connected is in the dual. But although in these verses Agni and Kâma are distinguished from each other, Kâma may be there looked upon as a superior form of the other deity.

² In the Taitt. Br. ii. 8, 8, *śraddhā*, or faith, is said to be the mother of Kâma. Thus, however, the commentator explains as signifying merely that she is the means of obtaining all desired rewards, since no action takes place unless men have faith.

enemies. May breath, cattle, life forsake them. . . . 7. May all the gods be my defence; may all the gods attend upon this my invocation. 8. Ye [gods], of whom Kâma is the highest, accepting this oblation of butter, be joyful in this place, granting me deliverance from my enemies. 9. Indra, Agni, and Kâma, mounted on the same chariot, hurl ye down my foes; when they have fallen into the nethermost darkness, do thou, Agni, burn up their dwellings. 10. Kâma, slay my enemies; cast them down into thick (*ñi*. blind) darkness. Let them all become destitute of power and vigour, and not live a single day. 11. Kâma has slain my enemies, has made for me a wide room and prosperity. May the four regions bow down to me and the six worlds bring fatness. 12 (= A. V. iii. 6, 7). Let them (my enemies) float downwards like a boat severed from its moorings. There is no return for those who have been put to flight by our arrows. . . . 16. With that triple and effectual protection of thine, O Kâma, that spell (*brahma*), which has been extended [in front of us as] armour, and made impenetrable, do thou drive away, etc. (as in v. 5). 17. Do thou, Kâma, drive my enemies far from this world by that [same weapon, or amulet] wherewith the gods repelled the Asuras, and Indra hurled the Dasyus into the nethermost darkness.¹ (V. 18 is nearly a repetition of v. 17). 19. Kâma was born the first. Him neither gods, nor Fathers, nor men have equalled. Thou art superior to these, and for ever great. To thee, Kâma, I offer reverence. 20. Wide as are the heaven and earth in extent; far as the waters have swept; far as Agni [has blazed];—thou art yet superior to these (as in v. 19). 21. Great as are the regions and the several intermediate regions, the celestial tracts, and the vistas of the sky,—thou art yet superior, etc. 22. As

¹ In A. V. viii. 5, 3, mention is made of a jewel or amulet, by which Indra slew Vṛtra, overcame the Asuras, and conquered heaven and earth, and the four regions." And in A. V. viii. 8, 5 ff. we are told of another instrument of offence belonging to Indra, in addition to the thunderbolt, arrows, and hook, described in the R. V. (see my former paper, p. 92), viz., a net: 5. "The air was his net; and the great regions the rods for extending the net. Enclosing within it the host of the Dasyus, Śakra overwhelmed it. 7. Great is the net of thee who art great, O heroic Indra! . . . within it enclosing them, Śakra slew a hundred, a thousand, ten thousand, a hundred millions of Dasyus, with his army."

many bees, bats, reptiles, *vaghas* (?), and tree-serpents as there are, thou art yet superior, etc. 23. Thou art superior to all that winks, or stands, superior to the sea, O Kâma, Manyu. Thou art superior, etc. 24. Even Vâta (the Wind) does not vie with Kâma, nor does Agni, nor Sûrya, nor Chandramas (the Moon). Thou art superior, etc. 25. With those auspicious and gracious forms of thine, O Kâma, through which that which thou choosest becomes true,—with them do thou enter into us; and send malevolent thoughts away somewhere else.”

A. V. xix. 52, is another hymn addressed to the same deity.

It is well known that Greek mythology connected Eros, the god of love, with the creation of the universe somewhat in the same way as Kâma is associated with it in R. V. x. 129, 4. Thus Plato says in the Symposium (sect. 6): “Eros neither had any parents, nor is he said by any unlearned man or by any poet to have had any. But Hesiod declares that chaos first arose, and ‘then the broad-bosomed earth, ever the firm abode of all things, and Eros.’ He says that after chaos these two things were produced, the earth and Eros. Now Parmenides speaks thus of the creation, ‘He devised Eros the first of all the gods.’ And Acusilaus also agrees with Hesiod. From so many quarters is Eros admitted to be one of the oldest deities.” (See the article Eros in Dr. Smith’s Dictionary of Greek and Roman Biography and Mythology, and the authorities there referred to).

In another hymn of the A. V. (iii. 25), Kâma, like the Eros of the Greeks and Cupid of the Latins, is described as the god of sexual love. The commencement of it is as follows: “1. May the disquieter disquiet thee. Do not rest upon thy bed. With the terrible arrow of Kâma I pierce thee in the heart. 2. May Kâma, having well directed the arrow which is winged with pain, barbed with longing, and has desire for its shaft, pierce thee in the heart. 3. With the well-aimed arrow of Kâma, which dries up the spleen, . . . I pierce thee in the heart.”¹

¹ This hymn is translated by Professor Weber in his *Indische Studien*, v. 224 ff., from whose version I have derived assistance.

KĀLA, OR TIME.

In the next two remarkable hymns we find an altogether new doctrine, as Time is there described as the source and ruler of all things:—

A. V. xix. 53:¹ "1. Time carries [us] forward, a steed, with seven rays, a thousand eyes, undecaying, full of fecundity. On him intelligent sages mount; his wheels are all the worlds. 2. Thus Time moves on seven wheels; he has seven naves; immortality is his axle. He is at present all these worlds. Time hastens onward, the first god. 3. A full jar is contained in Time. We behold him existing in many forms. He is all these worlds in the future. They call him Time in the highest heaven. 4. It is he who drew forth the worlds, and encircled them. Being the father, he became their son. There is no other power superior to him. 5. Time generated the sky and these earths. Set in motion by Time, the past and the future subsist. 6. Time created the earth; by Time the sun burns; through Time all beings [exist]; through Time the eye sees. 7. Mind, breath, name, are embraced in Time. All these creatures rejoice when Time arrives. 8. In Time rigorous abstraction (*tapas*), in time the highest (*jyeshtham*), in Time divine knowledge (*brahma*) is comprehended. Time is lord of all things, he who was the father of Prajāpati. 9. That [universe] has been set in motion by him, produced by him, and is supported on him. Time, becoming divine energy (*brahma*), supports Parameshthin. 10. Time produced creatures; Time in the beginning [formed] Prajāpati. The self-born² Kasyapa sprang from Time, and from Time [sprang] rigorous abstraction (*tapas*)."

¹ A great deal is said about the potency of Kāla, or Time, in the Śānti-parva of the Mahābhārata, vv. 8106, 8112, 8125 ff., 8139-8144, 8758, 9877 f., 10060.

² The word which I have rendered "self-born" is *svayambhūh*. This term must in certain cases be rendered by "self-existent," as in Manu i. 6-11, where it is applied to the undeveloped primeval Deity, the creator of Brahmā. In other places, however, Brahmā himself, the derived creator, is called *svayambhūh*, as in M. Bh. Śāntip. v. 7569, though he had previously (in v. 7530) been declared to have been born in a lotus sprung from the navel of Sankarshana, the first-born offspring (v. 7527) of Vishnu. The same epithet is applied to Brahmā in the Bhāg. Pur. iii. 8, 15. But in fact, *svayambhūh* is well known to be one of the synonyms of Brahmā, though that god is nowhere represented as an underived, self-existent being. This word must therefore be regarded as not necessarily meaning anything more than one who comes into existence in an extraordinary and supernatural manner.

A. V. x. 54. "1. From Time the waters were produced, together with divine knowledge (*brahma*), *tapas*, and the regions. Through Time the sun rises and again sets. 2. Through Time the wind blows [*ut.* purifies]; through Time the earth is vast. The great sky is embraced in time. 3. Through Time the hymn (*mantra*) formerly produced both the past and the future. From Time sprang the Rik verses. The Yajus was produced from time. 4. Through Time they created the sacrifice, an imperishable portion for the gods. On Time the Gandharvas and Apsarases, on Time the worlds are supported. 5, 6. Through Time this Angiras and Atharvan rule over the sky. Having through divine knowledge (*brahma*), conquered both this world, and the highest world, and the holy worlds, and the holy ordinances (*vidhrtā*), yea all worlds, Time moves onward as the supreme god."

Rohita is identified with Kāla, A. V. xiii. 2, 39.

The conception of Kāla in these hymns is one which, if taken in its unmodified shape, would have been esteemed heretical in later times.¹ Thus among the several forms of speculation which are mentioned at the commencement of the Śvetāśvatara Upanishad, for the purpose, no doubt, of being condemned as erroneous, is one which regards Kāla, or Time, as the origin of all things. The line in which these different systems are mentioned is as follows: *kālaḥ svabhāvo nityatir yadrchhā bhūtāni gonī puruṣaḥ*. It is the verse referred to in the following note of Prof. Wilson in p. 19 of his Vishṇu Purāṇa (Dr. Hall's ed.): "The commentator on the Moksha Dharma (a part of the Śānti-parva of the M. Bh.) cites a passage from the Vedas, which he understands to allude to the different theories of the cause of creation (then follows the line just quoted); time, inherent nature, consequence of acts, self-will, elementary atoms, matter, and spirit, asserted severally by the astrologers, the Buddhists, the Mimāṃsakas, the logicians, the Sāṅkhyas, and the Vedāntins."²

¹ The M. Bh. however, Anuśāśana-parva, vv. 51-56, makes Mṛtyu, or death, declare that all natures, all creatures, the world itself, all actions, cessations and changes, derive their essential character from Time, while the gods themselves, including Vishṇu, are created and destroyed by the same power (*kālā*).

² "Κράτος was also," adds Prof. Wilson, "one of the first generated agents in creation, according to the Orphic theogony."

Manu (i. 24), declares Kāla (Time) to have been one of the things created by Brahmā. But though not admitted as itself the origin of all things, Kāla is nevertheless recognised by the author of the Vishṇu Purāṇa as one of the forms of the supreme Being. See pp. 18, 19, and 25, of Dr. Hall's edition of Wilson's Vishṇu Purāṇa, and the note in p. 19 already referred to, where Prof. Wilson says, "Time is not usually enumerated in the Purāṇas as an element of the 'first cause;' but the Padma Purāṇa and the Bhāgavata agree with the Vishṇu in including it. It appears to have been regarded, at an earlier date, as an independent cause." See the Bhāg. Pur. iii. 5, 34-37; iii. 8, 11 ff.; iii. 10, 10-13; iii. 11, 1 ff.; iii. 12, 1 ff. We thus see the authors of the Purāṇas interweaving with their own cosmogonies all the older elements of speculation which they discovered in the Vedas; and by blending heretical materials with others which were more orthodox, contriving to neutralize the heterodoxy of the former.

A few general observations are suggested by a consideration of the principal passages which have been quoted in this paper.

I. The conceptions of the godhead expressed in these texts are of a wavering and undetermined character. It is clear that the authors had not attained to a distinct and logical comprehension of the characteristics which they ascribed to the objects of their adoration. On the one hand, the attributes of infinity, omnipotence, omnipresence, are ascribed to different beings, or to the same being under the various names of Purusha, Skambha, Brahma, Hiranyagarbha, etc. (R. V. x. 90, 1 ff.; x. 121, 1 ff. A. V. x. 7, 10, 13, 31-33; x. 8, 1). And yet in other places these same qualities are represented as subject to limitations, and these divine beings themselves are said to expand by food, to be produced from other beings (as Purusha from Virāj), to be sacrificed, to be produced from *tapas*, or to perform *tapas* (R. V. x. 90, 2, 4, 7. A. V. x. 2, 12 ff., 26; x. 7, 31, 36, 38).

II. In these passages divine power is variously conceived, sometimes as the property of one supreme person, as Purusha, Skambha, etc.; while in other places it is attached (1) to

some abstraction as Kāma (Desire), Kāla (Time), or (2) to some personification of energies residing in living beings, as Prāṇa (Life or Breath), or (3) of the materials (*uchhishṭa*) or the implements (*juhū*, *upabhart*, etc.) of sacrifice, or is ascribed (4) to the vehicles of adoration, to hymns and metres, such as the Virāj, which is said (A.V. viii. 10, 1) to have been identical with the world, or (5) to the guardian of sacred science, and future minister of religious rites, the Brahmachārin. It need occasion no surprise that the young priest should be regarded as invested with such transcendent attributes, when even the sacrifices which he was being trained to celebrate, the hymns and metres in which he invoked the gods, and the very sacrificial vessels he handled were conceived to possess a supernatural potency.

It is difficult to seize the different elements of thought and feeling which may have concurred to give birth to this hazy congeries of ideas, in which the real centre of divine power is obscured, while a multitude of inferior objects are magnified into unreal proportions, and invested with a fictitious sanctity. But these extraordinary representations reveal to us in the Indians of the Vedic age a conception of the universe which was at once (a) mystical or sacramental, (b) polytheistic, and (c) pantheistic; (a) everything connected with religious rites being imagined to have in it a spiritual as well as a physical potency; (b) all parts of nature being separately regarded as invested with divine power; and yet (c) as constituent parts of one great whole.

I shall add some remarks on the relation of the Vedic polytheism to the earlier religion, which we may suppose to have prevailed among the primitive Aryans.

M. Adolphe Pictet, in his work "*Les Origines Indo-Européennes*," vol. ii., has lately discussed the question whether that religion was from the first a polytheism, embracing all the principal powers of nature, as comparative philology shows it to have been about the time of the separation of the different branches of the race, or whether it had been originally monothéistic.

He thinks that as a polytheism such as we find existing at the

dawn of Aryan history could only have been developed gradually, it must have been preceded by a more simple system (p. 651). This inference he supports by the remark that the names of most of the gods in the Aryan mythology correspond with those of the great objects of nature, designated by some of their most characteristic attributes. But as these natural objects have derived their appellations from their physical qualities alone, they could not originally, at the time when they received their names, have been regarded as divinities. If nature-worship had prevailed among the Aryans from the commencement, some trace of this fact must have been preserved in their language, which, however, manifests nothing but the most complete realism as regards the epithets applied to natural phenomena. As it thus appears that the great objects of nature could not have been regarded as divine at the time when the language was formed, the Aryans could not originally have been polytheists. It is not, however, to be imagined that a race so highly gifted should even at this early period have been destitute of all religious sentiments and beliefs. But if not polytheists, they must have been monotheists. This conclusion M. Pictet corroborates by referring to the most ancient names of the Deity, such as *Deva*, etc., which he regards as in their origin unconnected with natural objects or phenomena. This primitive monotheism of the Aryans he supposes to have arisen from the necessity which they instinctively felt to refer the production of the world to one first Cause, whom they would naturally place not on earth, their own familiar abode, but in the mysterious and inaccessible heavens. This supreme Being would thus be called *Deva*, or the celestial; and as the heaven which he inhabited was one, so would He himself also be conceived of as an Unity. This primitive monotheism, however, could not have been very clearly defined, but must have remained a vague, obscure, and rudimentary conception. It would not otherwise be easy to understand how it should have degenerated into polytheism. But as the idea of God remained veiled in this mysterious obscurity, it became necessary for the worshippers to seek for some divinities intermediate between Him and themselves, through whom they might approach Him; and to explain the multiplicity of phenomena (which they were not as yet sufficiently enlightened to derive from the uniform action of one central will), by regarding them as regulated by a plurality of divine agents. At first, however, the polytheism would be simple, and the subordinate deities composing the pantheon would be considered as the ministers of the one supreme Deity. Such may have been the state of things when the different branches of the Aryans separated. The polytheistic idea, however, when once

it had begun to work, would tend constantly to multiply the number of divinities, as we see it has already done in the Vedic age. So great, however, is the power exercised over the human mind by the principle of unity, that the idea of one supreme Being, though obscured, is never lost, but is always breaking forth like a light from the clouds in which it is enveloped. The traces of monotheism which are found in the Rig Veda may perhaps, M. Pictet thinks, be reminiscences of the more ancient religion described above, though the pantheistic ideas observable, whether in the myths or in the speculations of the same hymn-collection, are the results of a new tendency peculiar to the Indian intellect. While, however, the Indians thus eventually fell into pantheism, the Iranians had at an earlier period embraced a reformed system, not dualistic, as is commonly supposed, but monotheistic; and the religious separation which then took place between the two tribes may have had its origin in a reaction of one section of the nation against the growing polytheism, and a recurrence to the principles of the old monotheism, of which the remembrance had not been altogether lost (pp. 708 ff.).

I scarcely think that M. Pictet's theory regarding the character of the primitive religion of the Aryans is borne out by the arguments which he adduces in its support.

1. It may be quite true that the complicated polytheism which we find in the hymns of the Rig Veda, or even the narrower system which we may suppose to have existed at the separation of the Indian and Iranian tribes, could only have been the slowly-developed product of many centuries; but this does not prove that a simpler form of nature-worship, embracing a plurality of gods, might not have existed among the ancestors of these tribes from the beginning of their history. I can see no reason for the conclusion that monotheism must necessarily have been the starting-point of the system.

2. Again, the fact that the great objects of external nature, the sky, the earth, the sun, were designated in the oldest Aryan language by names descriptive merely of their physical characteristics, supposing it to be admitted, would not suffice to establish M. Pictet's inference that no divine character was attributed to those objects at the time when they were named. Though we suppose that the sky (*dyu* or *dīp*) derived its appellation from its luminous appearance, the earth (*prthivi* or *māhi*) from its breadth or vastness, and the sun (*sūrya* or

savitṛ) from its brightness and fecundating power, it does not follow that, though familiarly called by these names, they were not at the same time regarded as living powers, invested with divine attributes. How strong soever may have been the religious feelings of the primitive Aryans, however lively their sense of the supernatural, and however forcibly we may therefore imagine them to have been impelled to deify the grand natural objects by which they were surrounded and overawed, it is obvious that the physical impressions made by those objects on their senses would be yet more powerful (in proportion as they were more frequent and more obtrusive); and that consequently the sky, earth, sun, etc., even though regarded as deities, would naturally be called by names denoting their external characteristics, rather than by other appellations descriptive of the divine attributes they were supposed to possess.

If an etymological argument of this sort were to be considered as settling the question, we might in like manner insist that because the word *Varuṇa* means (or is supposed to mean) the enveloper, it must therefore in the beginning have designated the sky alone (as the corresponding word *ὐρανός* afterwards did in Greek), and could not have been the name of a divinity. But this conclusion, however it may appear to be confirmed by Greek usage, receives no support from the most ancient Indian literature, in which the word is never employed for sky.

In such inquiries, moreover, it is unsafe to build too much on etymologies, many of which are in themselves extremely uncertain.

On the subject before us I will quote some remarks by two recent French writers. The first of these is M. Edmond Scherer, an acute theologian and accomplished critic, who, in a review of M. Pictet's work, thus expresses himself:—

“M. Pictet distinguishes in the religion of the Aryans two elements contrary in appearance, (1) a monotheism pure and elevated, which conceives the Deity as a being distinct from the world; (2) a polytheism resulting from the personification of natural objects, and which, by attributing life to these objects, creates an entire mytho-

logy. This apparent contradiction M. Pictet explains by a development. He thinks the human mind must have proceeded from the simple to the complex, from unity to diversity, that polytheism has arisen from the need of seeking other beings intermediate between the supreme Being and man, and that it has thus been able to establish itself without destroying altogether the first or monotheistic idea. We are thus brought back to the problem with which M. Renan has dealt in his studies on the Semitic races, although with this difference, that M. Renan opposed the Semite, as the genius of monotheism, to the Arya, as the genius of polytheism. Perhaps, in both cases, the difficulty arises from regarding as absolute an opposition which is merely relative. There never has been, and doubtless there never will be, either a pure polytheism or a pure monotheism. Thus religions can only be defined or characterised by the predominance of the one of the two elements over the other; and their history consists less in successive phases, in their passing from one form to the other, than in the coexistence and the struggle of two principles answering to two requirements of the human soul which are equally imperious."—(*Mélanges d'Histoire Religieuse*, pp. 35 f.)

On the same subject another distinguished theologian of the critical school, M. Albert Réville, writes as follows in the "*Revue des Deux Mondes*" (Feb. 1864, p. 721 f.):—

"If we had before us positive facts attesting that the march of the human mind has been such (as M. Pictet describes), we should only have to surrender, and admit, contrary to all probability *à priori*, that man while still sunk in the most profound ignorance was better able to grasp religious truths than he was at the epoch when he began to reflect and to know. But have these facts any existence? So long as none can be alleged which have a demonstrative force, ought we not to hold to the hypothesis, confirmed by so many analogies, of a gradual elevation of religion (as of all the other spheres in which the human mind moves), from the simplest elements to the most sublime conceptions?" Again: "It is evident, and fully admitted by M. Pictet, that our ancestors were polytheists before their separation; but at that period this polytheism was not of yesterday. It had already had a history; and it is a matter of course that in the historical development of a polytheistic religion, there must have been, as it were, guesses, germs, presentiments of monotheism. From the moment when a plurality of divine beings is recognised, a community of divine nature between them all is also admitted. In this way arise such epithets as 'luminous,' 'ador-

able, 'living,' 'mighty,' which in course of time become substantives like our word 'Dieu' itself. The sky, personified, and become an object of adoration, speedily usurps the characteristics of a supreme Deity, elevated above all others, and master of an irresistible weapon, the thunderbolt. Thus in most mythologies the sky is what it is in that of the Greeks, the Jupiter, the sovereign father of gods and men. In short, it is clear that the human mind, in proportion as it observes and reflects, rises more and more towards monotheism, in obedience to that imperious law, hidden in the depths of its being, which leads it to the logical pursuit of unity. But this movement is very slow, greatly retarded by the force of tradition and habit, and we ought not to place at the beginning that which can only be found at the very end of the process."

I shall conclude with an extract from Professor R. Roth's Essay on the "Highest gods of the Aryan races," (*Journal of the German Oriental Society*, vi. 76 f.), in which that able writer, while holding that the religion of those tribes in its earlier stages contained a more spiritual element which was eventually preserved in a modified form by the Zoroastrian creed, recognizes, as also embraced in that elder religion, a system of nature-worship which afterwards became the most prominent element in the Indian mythology. We must, therefore, regard Roth also as opposed to M. Pictet's theory of a primitive monotheism. A part of this passage has been already given in my former paper, pp. 101 f.; but it is necessary that that portion should be repeated here with a view to the proper comprehension of the remainder.

"But that which still further enhances the interest of this inquiry, and is of especial importance in reference to the primitive period, is the peculiar character attaching to the conception of the Âdityas. The names of these deities (with a certain reservation in regard to that of Varuṇa) embrace no ideas drawn from physical nature, but express certain relations of moral and social life. Mitra, 'the friend,' Aryanān, Bhaga, Anṣa, the gods who 'favour,' 'bless,' 'sympathize,' and Dakṣha, 'the intelligent,' are pure spirits, in whom the noblest relations of human intercourse are mirrored, and so appear (*i.e.* the relations appear) as emanations of the divine life, and as objects of immediate divine protection. But if the earliest Aryan antiquity thus beheld in its highest gods not the most prominent manifestations of physical nature, but the conditions

of moral life and society, and consequently esteemed these moral blessings more highly than anything connected with the wants and enjoyments of sense, we must ascribe to that age a high spiritual capacity, whatever may have been its deficiency in the constituents of external civilization.

"These considerations throw some light on the principles and character of the two Aryan religions which have sprung from one and the same source. The religion of Ormuzd holds fast, while it shapes after its own peculiar fashion, the supersensuous element called into existence by the higher order of gods belonging to the common ancient creed, and eventually rejects almost entirely the *deities representing the powers of nature, which, as well as those of the former class, it had inherited from the earliest period.* The Vedic creed, on the other hand, is preparing to concede the highest rank to the latter class (the representatives of the powers of nature), to transfer to them an ever increasing honour and dignity, to draw down the divine life into nature, and bring it ever closer to man. The proof of this is especially to be found in the myth regarding Indra, a god who, in the earlier period of Aryan religious history, either had no existence, or was confined to an obscure province. The Zend legend attributes to another deity the function which forms the essence of the later myth regarding Indra. This god Trita, however, disappears from the Indian mythology in the course of the Vedic age, and Indra succeeds him. And not only so, but towards the end of this period Indra begins to push aside even Varuna himself, the highest god of the ancient creed, from the position which is shown, partly by historical testimonies, and partly by the very conception of his character, to belong to him, and becomes, if not the supreme god, at least the national god, whom his encomiasts strive to elevate above the ancient Varuna."

"Thus the course of the movement is that an ancient supreme deity, originally common to the Aryans (*i.e.* the ancestors of the Persians and Indians), and perhaps also to the entire Indo-Germanic race, Varuna-Ormuzd-Uranos, is thrown back into the darkness, and in his room Indra, a peculiarly Indian, and a national, god, is introduced. With Varuna disappears at the same time the old character of the people, while with Indra a new character, foreign to the primitive Indo-Germanic nature, is in an equal measure brought in. Viewed in its internal essence, this modification in the religious conceptions of the Aryans consists in an ever increasing tendency to attenuate the supersensuous, mysterious side of their creed, till at length the gods who were originally the highest and the most spiritual, have become unmeaning representatives of

nature, and Varuṇa is nothing more than the ruler of the sea, while the Ādityas are the mere regents of the sun's course.

"When the higher and more spiritual elements in the Indian creed had thus become so greatly reduced, it was inevitable that a reaction should ensue," etc.

Although, towards the close of the preceding passage, Professor Roth speaks of an "ancient supreme deity" (*ein alter . . . oberster Gott*) as "originally common to the Aryans," it is evident from the entire context that he does not regard this deity as their only object of adoration, since he recognizes the existence of a plurality of gods. In the previous part of his dissertation, too, Roth speaks (p. 70) of the close relation in the Vedic era between Varuṇa and another god, Mitra,—a relation which he holds to have subsisted from an earlier period. And at p. 74, he refers to the activity and dignity of Varuṇa being shared by the other Ādityas, though no separate provinces can be assigned to them, while he is the first of the number, and represents in himself the powers of the whole class. If this description apply to the ancient Aryan religion, it cannot be properly said to have been monotheistic, though one deity may have been more prominent than the rest.

I have been favoured with the following note on the subject of A. V., x. 7, by Professor Goldstücker, whom I consulted as to the sense of verse 21, and the idea conveyed by the word *Skambha*, which forms the subject of the hymn :—

"The sense of *skambha* is in my opinion the same as that given in your Original Sanskrit Texts, vol. iv., pp. 17, 18—*skambh* and *stambh* being merely phonetic varieties of the same dhātu—and *skambha*, therefore, the same as *stambha*. It is the 'fulcrum,' and in the Atharvaveda hymns, x. 7 and 8, seems to mean the fulcrum of the whole world, in all its physical, religious, and other aspects. The object of the hymn being to inquire what this fulcrum is, from the answer given to the various questions it seems to follow that it is there imagined to be the primitive Deity or the primitive Veda, the word *brahman* in the neuter implying both. From this primitive Veda, not visibly but yet really (*sat*) existing, not only all the gods, worlds, religious rites, etc. (vv. 1, 2, ff, 19 ff.) were derived, but also the existing three Vedas (v. 14) and

the Atharvan were 'fashioned' (v. 20). This *skambha* is, therefore, also *jyeshtham brahma* (vv. 24, 32, 33, 34, 36.—8 1), and it has a corresponding preæval *jyeshtham brāhmaṇam* (v. 17). Hence, while he who knows the (existing) Veda, has also a knowledge of Brahṁā, —he who knows Brahṁā and also Prajāpati, and (hence) possesses a knowledge of the preæval Brāhmaṇa portion (of the preæval Veda), may *infer* (*anu*) from such knowledge a knowledge of the Skambha or that of the preæval Veda itself (v. 17). This preæval Veda is the 'treasure' which is kept by the gods only (v. 23); hence the Atharvaveda priest (*brahmā*) who has a knowledge of those god-guardians of the preæval Veda, has *the* knowledge (or, he who has such a knowledge, is a (true) Atharvaveda priest; v. 24). From this, then, it would likewise follow that the existing three Vedas are merely portions of the preæval Veda, whence they were derived, or to adhere to the metaphor, branches of that tree-fulcrum (compare v. 38); and, moreover, that while *skambha* is *the* reality, these branch-vedas are not *the* reality, though those who do not understand the Skambha, may take them for such (v. 21). 'Some people think that the *existing* branch (i.e. the existing Vedas —compare v. 20) which is not *the* reality (*asat*) is as it were (*iva*) the highest (*paramam*) Veda; on the other hand, those (people) inferior (to the former), who believe that it is *the* reality (*sat*), worship *thy* branch (i.e. those later Vedas).' Here the word *iva*, in my opinion, implies that the *jandh* of the first half verse have still a doubt, and therefore do not identify both the preæval and the existing Vedas; whereas those people introduced with *uta* (*uta-u*) are more ignorant in assuming for certain such an identity, and therefore proceed to a practical worship of those Vedas."

So far Professor Goldstücker.

The words *vetaso hiranyayaḥ* which occur in v. 41 of the hymn under consideration (A.V. x. 7) are also found in R. V. iv. 58, 5: "I behold the streams of butter (*ghṛta*); in the midst of them is the golden reed (*hiranyayo vetasah*)," which the commentator interprets as meaning *ap-sambhavo 'gnir vaidyutah*, the "fire of the lightning produced in the aerial waters."

With R. V. i. 164, 46, quoted at the beginning of the preceding paper, compare R. V. x. 114, 5: *suparnam ciprāḥ kacayo vachobhir ekam santam bahudhā kalpayanti*. |

ART. XIV.—*Brief Notes on the Age and Authenticity of the Works of Āryabhaṭa, Varāhamihira, Brahmagupta, Bhaṭṭotpala, and Bhāskaraśāhārya.* By Dr. BRAJ DĀS, Honorary Member R.A.S.

[Communicated by F. HALL, Esq., July 4, 1904].

I. ĀRYABHAṬA.

THE name of this celebrated astronomer is written either Āryabhata or Āryabhaṭa, but generally with one ṭ only. In an old manuscript of the *Brahma Sphuṭa Siddhānta* of Brahmagupta, copied in Samvat 1678, or A.D. 1621, the name occurs about thirty-three times,¹ and is invariably written Āryabhata; and a double ṭ cannot be introduced without violating the Āryā metre. Bhaṭṭa Utpala, in his commentary on the *Vārāha Sanhitā*, cites a passage from *Varāha Mihira* as follows:—

सङ्कार्थरावसमये दिनप्रवृत्तिं जगद् चार्यभटः ।

Here the word has only one ṭ, and would not scan with two. This scholiast almost always writes, when quoting Āryabhata, तथा चार्यभटः. In a commentary by Someśvara on the Āryabhaṭīya Sūtra, of which the manuscript in my possession was copied about three hundred years ago, the name is spelt with only one ṭ:

आचार्यार्यभटोक्तसूत्रविवृतिः ।

In a copy of the *Mahā Āryasiddhānta*, dated Śaka 1676, A.D. 1598, is the following line:—

इत्यार्यभटप्रोक्तास्त्रिंशत्तत्त्वानिब्रह्मास्मात् ।

Bhaṭṭa Utpala and Someśvara sometimes call him Āchāryabhata or Āchārya Āryabhata; Brahmagupta, in his *Siddhānta*, chap. x. 62, Āryāḥ, and in chap. xxi. 40, Āchāryabhata. In his *Khaṇḍa Khāḍya Karaṇa*, copied Samvat 1783, he is called

¹ Colebrooke states that Brahmagupta cites Āryabhata "in more than a hundred places by name." *Misc. Ess.* vol. ii. p. 475. He evidently includes citations or allusions by the learned commentator Chaturveda Prthūdaka Svāmin, whose commentary I regret I do not possess.

Āchārya Āryabhata or Āryabhata. In a commentary on it by Āmarāja, he is simply called Āchāryabhata. Hence it appears to me clear that the proper spelling of this name is Āryabhata.

The works attributed to Āryabhata, and brought to light by European scholars, are :—

An Āryasiddhānta (Mahā Ārya Siddhānta), written, according to Bentley, in the year 4423 of the Kali Yuga, or A.D. 1322.¹

Another Āryasiddhānta, called Laghu, a smaller work, which Bentley supposed was spurious,² and the date of which, as stated in the text, was interpreted to mean the year of the Kali Yuga 3623, or A.D. 522. Of both these works Mr. Bentley possessed imperfect copies. He assumed a comparatively modern work, attributed to Āryabhata, and written in A.D. 1322, as the genuine Āryasiddhānta, and, reasoning on this false premiss, has denounced as spurious the real and older work, and has, further, been led into the double error of condemning the genuine works of Varāha Mihira, Brahmagupta, Bhāṭṭa Utpala, and Bhāskarāchārya, containing quotations and references to the older work, as modern impostures, and of admitting as genuine a modern treatise (the Jātakārṇava) as the work of Varāha Mihira.

Colebrooke, not having the works of Āryabhata before him, suggested that the older work might be a fabrication, but, from citations and references to Āryabhata in the works of Brahmagupta and Bhāṭṭa Utpala, came to a singularly accurate conclusion as to the age of Āryabhata, whose works he thought were different from either treatise in the possession of Bentley. "We shall, however," writes Colebrooke, "take the fifth [century] of Christ as the latest period to which Āryabhata can, on the most moderate assumption, be referred."³ In one place, indeed, Colebrooke correctly guesses that the Laghu Ārya Siddhānta is either the Āryashtasata or the Dasagītikā.⁴

¹ A Historical View of the Hindu Astronomy. London, 1825, p. 123

² Ibidem, pp. 168, 169.

³ Colebrooke's Misc. Ess. vol. II. p. 477.

⁴ Ibid. p. 467.

The following passage in the Mahā Āryasiddhānta explains itself:—

एवार्थमटोक्तास्त्रिंशत्काव्यमहाकाव्यात् ।

पाठैर्गतमुक्तेदं विशिष्टं तत्राद्या स्तोत्राया ॥

"That (knowledge) from the Siddhānta, propounded by Āryabhata, which was destroyed, in recensions, by long time, I have, in my own language, thus specified."

In another copy, the verse commences differently, having *Vṛddha* for *iti*; i.e. the first Āryabhata is called *Vṛddha* or old, whilst himself is the modern Āryabhata.

Strange to say, the date corresponding to A.D. 1322, mentioned by Bentley, is not to be found in my copies. But I believe he was here, for once, correct.

In the first volume of the Transactions of the Madras Literary Society, a paper was published by Mr. Whish, evidently founded on the works of Āryabhata senior. But, although Mr. Whish's paper is not available to me, I am positive he did not recognize his Āryabhaṭīya Sūtra as the work of Āryabhata senior.

Professor Lassen has some admirable remarks on Āryabhata.¹ He observes: "Of Āryabhaṭṭa's writings we have the following. He has written a short outline of his system, in ten strophes, which composition he therefore called *Daśagītaka*; it is still extant.² A more extensive work is the *Āryabhaṭṭayata*, which, as the title informs us, contains eight hundred distichs, but has not yet been rediscovered. The mean between these works is held by the *Āryabhaṭṭīya*, which consists of four chapters, in which the author treats of mathematics in one hundred and twenty-three strophes.³ In it he teaches the method of designating numbers by means of letters, which I shall mention again by and by. Besides, he has left a com-

¹ Indische Alterthumskunde, vol. ii., p. 1136.

² See Colebrooke's Misc. Ess. ii. p. 467. To the friendly offices of Mr. Gundert, a German missionary in India, I am indebted for a copy of this work, from a MS. in the possession of the Rājā of Kerkal, in Malabar. It is here called *Daśagītaka Sūtra*. I have also received from him a copy of the *Āryabhaṭṭīya*.

³ C. M. Whish names this work in the first dissertation mentioned in note 1, p. 1134, as well as in the second: *On the Quadrature of the Circle, etc.*, in Trans. of the Roy. As. Soc. iii. p. 609. Also *Masūdi* and *Albīrūnī* record it; see Reinaud's *Mémoires*, etc., pp. 321 and 322.

mentary on the Sūrya Siddhānta, which has been elucidated by a much later astronomer, and is, probably, the work called *Tantra* by Albīrūnī.¹ This may be the same which was communicated to the Arabs, with two other Siddhāntas, during the reign of the Khalif *Almansūr*, (which lasted from A.D. 754 till 775), by an Indian astronomer who had come to his court, but of which only the book properly so called, i.e. that of *Brahmagupta*, had been translated into Arabic, by order of that Khalif, by *Muhammed bin Ibrāhīm Alfazārī*, and had received the title of the great *Sind-hind*. (See Colebrooke's Misc. Ess. ii. p. 504 seqq.) From this juxtaposition it appears that sufficient materials are at hand for investigating the doctrines of this founder of mathematical and astronomical science in India. Therefore it would be very desirable if a mathematician and astronomer, provided with a competent knowledge of Sanskrit, were to undertake to fill up this great gap in the knowledge which we have hitherto possessed of the history of both these sciences."

To my learned friend Dr. Fitzedward Hall we are indebted for the first and accurate statement that, "as reference is made, in the Ārya Siddhānta, to Vṛddha Āryabhāṭa, there should seem to have been two writers called Āryabhāṭa." This correct reference Dr. Hall was enabled to make from having possessed himself of "two copies of the Ārya Siddhānta, both imperfect, and very incorrect." "This treatise is in eighteen chapters; and I more than suspect it to be the same composition which Mr. Bentley also had seen in a mutilated form,"² [i.e. the Mahā Ārya Siddhānta].

¹ See Wilson's Mackenzie Coll. i. p. 119, No. v. The title is Sūrya Siddhānta-prakāśa, and it contains the Sūtras of the Sūrya Siddhānta, with Āryabhāṭa's commentary, and explanations of it by a later author of the sixteenth century. The work contains three chapters with the superscriptions *Ganita*, i.e. Arithmetic, Algebra, and Geometry, *Kālakṛiyā*, by which very likely the doctrine of the calculation of the great periods must be understood, the title *Gola* of the third chapter designates the Globe, but is intended to denote Astronomy. Albīrūnī mentions a *Tantra* of Āryabhāṭa, see Reinsud's *Mémoire*, p. 335. In the commentary of *Paramādīpavara* on Āryabhāṭa's explanation of the Sūrya Siddhānta (called Sūrya-Siddhānta-vyākhyāna, and surnamed by the special title *Bhāṭṭiyādi-prakāśa*, the title of which Mr. Gundert has communicated to me, and which work is likely to be the same with the one adduced in the *Mackenzie Collection*, vol. ii. p. 121, named *Āryabhāṭa-eyākhyāna*), the work of Āryabhāṭa is called *Tantra-Bhāṭṭiya*.

² On the Ārya-Siddhānta. By Fitzedward Hall, Esq., M.A. Journal of the American Oriental Society, vol. vi. p. 559.

In an "Additional Note on Āryabhaṭṭa and his Writings," by the Committee of Publication, appended to Dr. Hall's paper, the learned writer under the initials W. D. W. brings to light the contents of Bhūta Viṣṇu's "Commentary on the Daśagītikā of Āryabhaṭṭa," from a manuscript of the Berlin Library, a copy of which was supplied to him by Prof. Weber.

From the nature of the contents given in Appendix A, it is clear to me that the treatise which is described as "a brief one, containing only about one hundred and fifty stanzas," consists not only of the Daśagīti Sūtra, with a commentary by Bhūta Viṣṇu, but also of the Āryāśṭasāta of Āryabhaṭṭa, which was hitherto believed to be unrecovered. The learned writer correctly remarks that the treatise is undoubtedly the same as Bentley's Laghu Ārya Siddhānta, and also that "the other Ārya Siddhānta, judging it from the account given of it by Bentley, appears to be, in comparison with this, a quite ordinary astronomical treatise, representing the general Hindu system with unimportant modifications." Yet he falls very nearly into the same error as Colebrooke, when he proceeds to remark: "Yet it seems clear that Brahmagupta and others have treated them as works of the same author, and have founded upon their discordances a charge of inconsistency against Āryabhaṭṭa."¹ The fact is, as we shall see, that Brahmagupta, Bhaṭṭa Utpala, and Bhāskara Āchārya know and cite only the elder Āryabhaṭṭa.

The next and last paper is on some fragments of Āryabhaṭṭa, by Dr. H. Kern in the Jour. Roy. As. Soc. vol. xx. pp. 371 seqq. After briefly noticing the works known to former writers as the works of Āryabhaṭṭa, and after alluding to the conclusion Dr. Hall arrived at, that there were two authors of the same name, he adds: "If the same course were adopted in regard to all the works ascribed to Āryabhaṭṭa, or to an Āryabhaṭṭa, if the contents were compared with the numerous fragments scattered in different works, chiefly commentaries, one might indulge the hope that the question of the authorship of Āryabhaṭṭa would be settled in a satisfactory manner."

¹ Journal of the American Oriental Society, vol. vi. pp. 561 and 564.

Dr. Kern proceeds "to contribute a small share towards solving the question," by giving extracts from the commentary of Bhaṭṭa Utpala on the *Vārāhi Sanhitā* of Varāha Mihira. In an additional note, at the conclusion of the paper, the learned author states that he was enabled, "by the kindness of Prof. Weber, to ascertain that all the quotations of Utpala, with the exception of one half-stanza, occur in a manuscript of the Berlin Library." Some of the passages puzzle him, especially the date A.D. 475, about which he observes: "Unfortunately, it is not clear whether the date of Āryabhaṭa is meant, or that of Bhūtavishṇu."¹

Adopting Dr. Kern's suggestion, I proceed to state briefly the result of an examination of the various works attributed to Āryabhaṭa. In a diligent and expensive search for old and rare Sanskrit, Prakrit, Arabic, and Persian manuscripts, noiselessly conducted for many years past, I have succeeded in procuring the following works whose authorship is attributed to Āryabhaṭa.

A. Three copies of what has been called the *Vṛddha* or *Laghu Ārya Siddhānta*, but, correctly speaking, *Āryabhaṭiya Sūtra*, consisting of the *Daśagīti Sūtra*, or *Daśagītikā*, and the *Āryāṣṭaśata*, or one hundred and eight couplets. These copies contain the following number of Āryās:—

| | Daśagīti Sūtra. | Āryāṣṭaśata. |
|---------------------|-----------------|--------------|
| Copy <i>a</i> | 13 | 108 |
| „ <i>b</i> | 13 | 108 |
| „ <i>c</i> | 13 | 108 |

There are two introductory stanzas at the commencement of copy *a*, evidently an after-addition, and not in the Āryā metre. This is a copy of a manuscript written in Śaka 1760, or A.D. 1838.

Copy *b*. The date of the original manuscript is omitted.

Copy *c* is an old manuscript, without date; but, from the character of the letters, and from the worn-out paper, it appears to be more than three hundred years old. It has, in addition, a *Bhāṣya*, or commentary, by *Someśvara*, containing

¹ P. 387.

about 64,000 letters. Unfortunately, portions are illegible or destroyed. The scholiast gives no information about himself, but adds that his commentary is founded upon one by Bhâskara. At the conclusion are the words *iti someṣvara-virachite âchâryabhatṭyaṃ bhâṣhyaṃ samâptam iti*.

B. Of the Mahâ Ârya Siddhânta I have a copy from Gujerat, containing eighteen chapters, copied in Śaka 1676, or A.D. 1754.

Two others are fresh copies of one or two originals, one of which has the date Śaka 1762, or A.D. 1840.

The Âryâs are from 600 to 612. There is no commentary.

I hope soon to be in possession of fresh copies of both these Siddhântas, with commentaries.

C. The Brahma Sphuṭa Siddhânta, or Brahma Siddhânta, of Brahmagupta, from Gujerat; transcribed in Śaka 1544, or A.D. 1622. Of this I have sent a copy to my learned friend, Professor Whitney.

D. The Khaṇḍa Khâdya Karaṇa, of Brahmagupta, with a Bhâṣhya, by Âma Śarman, son of Paṇḍita Mahâdeva, of Ânandapura; copied in Samvat 1783, or A.D. 1726. (Ânandapura is the modern Wadanagara, in Katyawar). This manuscript was sent to me by a learned Pandit, of Benares, whose acquaintance I was glad to make at Delhi last year.

E. The Vârâha Sanhitâ, with the commentary of Bhaṭṭotpala. Another copy of the text only.

F. The Bṛhaj Jâtaka of Vârâha Mihira; two copies, one lithographed in Bombay.

G. The Laghu Jâtaka of Vârâha Mihira.

The Vâsishṭha Siddhânta. Samvat 1810, or A.D. 1733.

The Vyâsa Siddhânta.

The Brahma Siddhânta.

The Romaka Siddhânta. Copied Samvat 1727, or A.D. 1670.

H. The Sûrya Siddhânta, with the Vâsanâbhâṣhya.

The Sârvabhauma Siddhânta.

The Tattva Viveka Siddhânta (imperfect).

A commentary on the Siddhânta Śiromaṇi by Vâchaspati.

The Sundara Siddhânta.

I am glad to announce that, in the Āryabhaṭīya, or Āryabhaṭīya Sūtra, we have got all the works of the elder Āryabhaṭa, at least all those which were known to Brahmagupta, Bhaṭṭa Utpala, and Bhāskara Āchārya.

My copies of the Āryabhaṭīya, or Laghu Ārya Siddhānta, are evidently identical with the one which Whish possessed, and with the Berlin manuscript; the latter containing about twenty-seven verses or Āryās more, in the shape of a commentary on the Daśagītikā, by Bhūtaviśṇu, which I have not.

Lassen's Āryabhaṭīya is, undoubtedly, the same work. Brahmagupta having cited and controverted a work of Āryabhaṭa, as Āryāshtaśata, Colebrooke understood and published that "Āryabhaṭa was the author of the Āryāshtaśata (eight hundred couplets)."¹ That Āryāshtaśata means eight hundred couplets is also assumed in the passage I have quoted from Lassen. None of the learned scholars who have written so ably on Āryabhaṭa have impugned the correctness of the translation. Professor Whitney goes so far as to state that Dr. Hall "has farther made it at least a probable supposition that the treatise in question (*i.e.*, the Mahā Ārya Siddhānta) is, in conformity with Colebrooke's earlier conjecture, to be identified with that so often credited to Āryabhaṭa by the name of Āryāshtaśata."²

But Āryāshtaśata, I venture to affirm, means a treatise of one hundred and eight couplets. Ashtādhikam satam Aśtaśatam.³ The Āryā from Brahmagupta, referring to this Āryāshtaśata, is as follows; it is in the Tantra Dūṣhaṇādhyāya, Chapter xi. Āryā 8:—

आर्याष्टशते पाता धमन्ति दशगीतिके खिराः पठिताः ।

मुक्तेन्नुपातमपमण्डले धमन्ति खिरा नातः ॥

"In the Āryāshtaśata, the Pātas (nodes) revolve; in the Daśagītikā, they are described as stationary."

These two statements, which led Brahmagupta to censure

¹ Colebrooke's Misc. Ess., vol. ii. p. 467.

² Journal of the American Oriental Society, vol. vi. p. 560.

³ See the Siddhānta Kaumudī of Bhāṭṭoji Dixita. Calcutta, 1864, vol. i. p. 369.

Āryabhata for inconsistency of doctrine, are to be found in my copies of the Āryabhaṭīya Sūtra. They are as follows :—

दशमी-आ-११ बुधभृगुकुजगुरुशनिववरदाः नखांशकान् प्रथमपाताः ।

सवितुरभीषां च तथा ह्यजस्रिमाहृत्यासिञ्च मन्दोच्चम् ।

मौलपाद आर्याः तारासहेन्दुपाता भ्रमन्त्यजस्रमपमण्डले - र्भेदः ।

अर्थाच्च मण्डसार्धे भ्रमति हि तस्मिन्वितिक्षाया ॥

In the twenty-fourth chapter (Sandhyādhyāya), Ārya 10, of his *Brahma Siddhānta*, Brahmagupta tells us that—

भट्टप्रज्ञाचार्येण विष्णुतन्त्रेण गणितगोलविदा ।

आर्याष्टसहस्रेण स्फुटसिद्धान्तः कृतो ब्राह्मः ॥

“Bhaṭṭa Brahmacārya, the son of Jishṇu, mathematician and astronomer, composed the *Brahma Sphuṭa Siddhānta*, in 1008 Āryās.” The word Āryāśṭaśāhaseṇa means 1008, and not 8000; and my copy of Brahmagupta’s *Siddhānta* consists of the former number of couplets.

Analogous examples may be produced from the *Smṛtis*, where numbers are given. But, to set aside all doubt of the correctness of my translation of the word *Āryaśṣṭaśata*, I produce nearly all the passages in the *Āryabhaṭṭiya Sūtra* which have been controverted by Brahmagupta:—

ब्रह्मगुप्तसिद्धान्त अध्याय १ आर्य ९ दशगीति. आर्य ५ वा होम न
युगपादानार्थमष्टस्वारि समानि चोढमनुयुगम्स्वगनालो ५।

छतयुगादीनि । यद्भिहितवान्न

तेषां स्युत्तसमाजमेकमपि ।

ब्र. आर्या १२ मनुसंधियुममिहृत्वा- कालपाद. आर्या ८४० त्तरसाहसं
र्यमटसन्ननुर्यतः मलयुमः । कल्प- ब्राह्मो दिवसो मलयुवानां ।

सत्पुरुषाणां सहस्रमष्टाधिकं तस्य ॥

त्र. आ. ६० अक्षतार्थभटः शीघ्रग- दशगीति आर्या ४ चंद्रोच्चर्तुविस्-
निंदूषं पातमख्यं स्वगतेः । ति- धनुषमुगुशिष्टुनभुगुजपिष्टुभुशे-
ख्यंतपह्वाणां घुषाचरं तस्व सं- पाक्षाः । मुफिनपपातविस्त्रोमा मु-
वादः ॥ धा.स्यवाक्कीदवाक्ष संकायां ॥

प्र. च. २ पा. ३३ आर्यभट्टस्याद्या- दशगीति पा. १० सार्धानि मंद-
भात् नमध्वममंदोच्च ग्रीष्मपरिधी- वृत्तं शशिः क्षयक्षयक्षयोक्ति-

नां । न स्रष्टा भीमायाः स्रष्टा ब्र-
ह्मोक्तमध्यायिः ॥

ब्र. अ. ६ आर्या. २१ आर्यभटः चेत्तां-
शीर्दृश्यादृश्याद्यदुक्तवांसदसत् । दृ-
ग्गणितविसंवादात् दृग्गणितं स्व-
काशांशैः ॥

ब्र. तंवदूषणाध्याय ११ आर्या ४
आर्यभटो युगपादान्स्त्रीन् व्यती-
तानाह कलियुगादौ यत् । तस्य
छातांतर्धस्यान् स्वयुगाद्यंती न तत्
तस्मात् ॥

ब्र. अ. ११ आ. ५ युगरविभगणाः
स्युघ्रितियत्प्रोक्तं तंचयोर्युगं स्रष्टं ।
विशती रब्बुदद्यानां तदंतरं हेतुना
चेन्न ॥

ब्र. अ. ११ आर्या ६ युगवर्षादीन-
वदक्षेत्रसितादेः समप्रवृत्तान् यत् ।
तदसद्यतः स्फुटयुतं न न स्त्रीर्याब्द-
पातागां ॥

ब्र. अ. ११ आर्या ९ आर्यभटो जा-
नाति यहाष्टकगतिं यदुक्तवांसद-
सत् । राज्ञकृतं न यहाष्टं तस्मातो
नाष्टमो राज्ञः ॥

ब्र. अ. ११ आर्या ११ ओकारो दि-
नचारे गुरोदयिकस्य भवति
कल्पादी । न भवत्यार्का यक्षादी-
कारे विस्तरस्तस्मात् ॥

ब्र. अ. ११ आ. १२ सूर्योदयास्तुर्ध्वान्
दिनपान् यदुवाच तदसदार्यभटः ।
संकीदये यतो ऋक्षास्तमचं ग्राह

भः । सागुलक्षलदृक्तया शनि-
गुरुकुजभृगुबुधोच्च शीघ्रिभ्यः ॥

गोलपाद आर्या ४ चंद्रोशीर्वाद्दश-
भी रविचिप्तो कंतिरस्थितिर । दृशः
नवभिर्भृगुर्भुगोक्षीर्द्धाधिकीर्द्धाधिकिर्य-
चाक्षरणाः ॥

दशगीति आर्या ५ कल्पादियुगपा-
दागचगुरुदिवसाश्च भारतात् पूर्वं ।

दशगीति आर्या ३ युगरविभगणाः
स्युघ्रपृथग्विचयमिचिदुशुक्लबुद्धि
शिनुरष्टस्र् प्राक् । कालपाद आ-
५ रविभगणारच्यब्दा ।

कालपाद आ. १२ युगवर्षमासदि-
वसाः समं प्रवृत्तास्तु चैत्रशुक्लादेः ।
काको यमनाद्यंतो ग्रहमेरुमीय-
ते चेत्ते ॥

गोलपाद. ४८ चितिरविद्योगात्
दिनकृत रवीदुयोगात् प्रसाधि-
तसिद्धुः । शतितारा ग्रहयोगास्तथैव
तारा ग्रहाः सर्वे ॥

दशगीति आर्या ५ मचगुरुदिव-
साश्च भारतात् पूर्वं ।

कालकियापाद. आर्या १६ सप्तति
होरेशाः शनैश्चराया यथाक्रमं शी-
घ्राः । शीघ्रकमास्तुर्ध्वो भवति च

सिद्धपुरे ॥

त्र. अ. ११ आ. १९ गसनिचिद्योवन-
परिधिन्निभूवासं पुन्य लावदता।
आत्माज्ञानं ख्यापितमनिश्चयः स्व-
मतिहृतकत्वात् ॥

त्र. अ. ११ आ. १७ प्राणेनैतिकलांभं
यदि तत् क्व कुतो त्रैवेत्किमध्वानं।
आवर्तनमुर्व्याश्चेन्न पतन्ति समुद्रयाः
कषात् ॥

त्र. अ. ११ आ. २२ उत्तरगोले या-
यां विषुवज्यातो यदुक्तमृनायां।
सममंडजगत्सद सरक्कातिज्यायां
यतो भवति ॥

त्र. अ. ११ आ. २३ व्यासार्धेन विभ-
क्ता दूरगतिजीवा चतुर्गुणा लब्धं।
लंबननाड्यः पंचदशगुणितयात्रि-
ज्याया भक्ता ॥

त्र. अ. ११ आ. २६ सम्बन्धमृणध्वन-

भूर्योदयात् दिनपः ॥ गोलपाद्-
आर्या. १३ उदयो यो संकाया
लोऽक्षमयः सवितुरेव सिद्धपुरे। म-
घाद्गो यमकोट्यां रोमविविधवे
धराचं स्थात् ॥

दशगीति. आर्या. ७ नृविद्योवनं
त्रिष्वभूवासः।

दशगीति. आ. ६ प्राणेनैति कलां
भंखयुगांशे यहजवो भवांशे र्कः।
गोल. आ. ९ अनुलोमगतिर्नोक्षः
पञ्चत्यचलं विलोमगं यद्वत्। सप्त-
लानि भानि तद्वत् समपश्चिमगानि
संकायाः ॥

गोलपाद्. आर्या ३१ सा विषुव-
ज्याना चेत् विषुवदुदक् नंबकेन
संगुणिता। विषुवज्या विभक्ता ल-
ब्धः पूर्वापरः शंकुः ॥

गोलपाद्. आर्या. ३२। ३३। ३४।
चित्तिजादुन्नतभागानां या ज्या स-
परतो भवेत् शंकुः। मध्यान्नतभान-
ज्या छाया शंकोस्तु तस्मै ॥ मध्य-
ज्योदयजीवा संवर्गे व्यासदनहते य-
क्षात्। तन्मध्यज्या कृत्योर्विशेषमूलं
स्वदृष्टेयः ॥ दृष्टेयपक्षतिविशेषित-
स्व मूलं स्वदूरगतेः कुवशात्। चिति-
स्वमदृक्छाया भूवासार्धं नभो म-
ध्यात् ॥

गोलपाद्. आर्या. ३५। ३६ विज्ञे-

मुक्तं पूर्वापरस्थिती दिनार्धस्य। यु-
क्तो भावो यन्नवति तत् क्षणध-
नयो स्थिती कतरत् ॥

ब्र. अ. ११ आ. ३४ विषेपगुणाचञ्चला
संनकभक्ता सपुणधनं यत्। उक्तमु-
द्यासमयोर्नसतिघटिकं तस्तद-
सत् ॥
ब्र. अ. ११ आर्या ४३ जानात्वेकम-
पि यतो नार्यभटो गणितकालयो-
जानां। नमद्या प्रोक्तानि ततः पुचक्
पुचक् दूषणान्वेषां ॥

पगुणाचञ्चला संनकभक्ता भवेत्
क्षणमुदकस्ये। उद्ये धनमसमये
दक्षिणमेधनमुणं चन्द्रे ॥ विषेपाप-
कममुत्कमणं विस्तारार्धकृतियुक्त-
मुदगृणमुदगयनेदक्षिणमे धनमुणं
चन्द्रे ॥

गो. आ. २९ विषेपगुणाचञ्चला सं-
नकभक्ता भवेत् क्षणमुदकस्ये।
उद्ये धनमसमये दक्षिणमे ध-
नमुणं चन्द्रे ॥
दश. आ १ आर्यभटस्त्रीणि गदति
वखितं कासक्रियां गोसं।

These extracts are given as in the original, without any attempt at correction. Colebrooke quotes and translates the following passage as from Āryabhāṭa, cited by Prthūdaka :—

भपञ्जरः स्थिरो भूरेवावृत्तावृत्त्य प्रातिदिवसिको उद्यासमयी सपाद-
वति नक्षत्रयहाणाम् ॥

“The sphere of the stars is stationary; and the earth, making a revolution, produces the daily rising and setting of stars and planets.”

With regard to this passage, Dr. Hall remarks that he has not sought it out in his manuscript of the Mahā Ārya Siddhānta. Nor would he find it there. The fact is, the Laghu Ārya Siddhānta is metrical; and the passage quoted is not so. This is observed by Dr. Hall; but he went in the wrong track in stating that “this extract might go to prove that Ārya, besides his works in verse, wrote others in prose.”²

I do not find the passage, literally, in either of the Siddhāntas; but I have no doubt that it is only a paraphrase of the follow-

¹ Colebrooke's Misc. Ess. vol. ii. p. 392.

² Journal American Oriental Society, vol. vi. p. 668.

ing line from Āryabhaṭa, in Pṛthūdaka's own words; Āryabhaṭīya, Golapāda, Ārya ix. :

समुक्षोभगतिर्वीक्षः पञ्चत्यचकं विक्षोभनं यद्वत् ।

अचक्षानि भानि तद्वत्समपश्चिमगानि सङ्ख्यायाम् ॥

"As a person in a vessel, while moving forwards, sees an immoveable object moving backwards, in the same manner do the stars, however immoveable, seem to move (daily). At Lankā (i.e. at a situation of no geographical latitude) they go straight to the west (i.e. in a line that cuts the horizon at right angles, or, what is the same, parallel to the prime vertical at Lankā)."¹

I have no doubt that, in the following passage, which has been a theme of fruitful discussion, the first line only is from Āryabhaṭa (it is the latter half of the fourth Ārya of the Kālapāda chapter, in my MS.); the second line is, in all likelihood, an addition by Bhaṭṭa Utpala :²

गुरुभगवत् राशिगुणा आश्वयुजाद्या नुरोरब्धाः ।

गुरुभगवानां संख्या विनयमवेदुर्हन्मभुवतुका ॥

"The revolutions of Jupiter, multiplied by the number of the signs (twelve), are the years of Jupiter, called Āshvayuja, etc.; his revolutions are equal to the number of the Jinās, a couple, the Vedas, the seasons, the fires (i.e. 364,224)."

Āryabhaṭa having an alphabetical notation of his own, it was surprising to find him make use of our arithmetical notation, which the second line quoted above implies. But now the enigma is solved : the second line is not of Āryabhaṭa.

The Daśagīti Sūtra, as the name purports, is composed of ten Āryās; the three additional ones, in my copies, relating to—1. invocation, 2. the alphabetical notation, and 3. the fruit or advantage of knowing the Daśagīti Sūtra. The Āryāṣṭaśata consists of three chapters, viz., 1. Gaṇita; 2. Kālakriyā; and 3. Gola. As the Āryabhaṭīya consists of the Daśagīti Sūtra and Āryāṣṭaśata, the treatise consists of four chapters,

¹ Journ. Roy. As. Soc. vol. xx. 1863, p. 376.

² Ibid. p. 378. The couplet in the Āryabhaṭīya is as follows :—

आक्षपाद् आर्या ४ स्तोत्रभगवत् सभगणीर्विशेषिताः स्तोत्रनीचपरिवर्ताः ।

गुरुभगवत् राशिगुणास्त्वाश्वयुजाद्या नुरोरब्धाः ॥

called *pādas*, of which the *Daśagiti Sūtra* is the first, and the remaining three as above. This arrangement was not clearly perceived by the learned writer of the additional note to Dr. Hall's paper.¹

Any one studying the Commentary of Munīṣvara, *alias* Viṣvarūpa, styled Marichi, on the *Siddhānta Śiromaṇi* of Bhāskarāchārya, and also his *Sārvabhauma Siddhānta*, cannot fail to remark that he clearly notices two Āryabhata. He calls, however, the author of the so-called *Mahā Ārya Siddhānta*, *Laghu Āryabhata*, or *Āryabhata junior*; and, in quoting from the senior, calls him simply *Āryabhata*. Sometimes *Āryabhata junior* appears only as plain *Āryabhata*; in all likelihood, from the fault of copyists.

Gaṇeṣa, in his commentary on Bhāskarāchārya's *Līlāvati*, had only to deal with *Āryabhata junior*; and, accordingly, he speaks of only one *Āryabhata*.

The *Sundara Siddhānta* of Jñānarāja also distinguishes a *Laghu* from a *Vṛddha Āryabhata*. Besides the passages referred to by Brahmagupta, all those cited by Bhaṭṭa Utpala and Bhāskara Achārya are found in my copy of the *Āryabhataṭīya*. There cannot now, therefore, possibly be any doubt of our having a correct copy of the works of *Āryabhata senior*; and I shall take the earliest opportunity of publishing the original text, with the commentary of Someṣvara, for the gratification of learned orientalists.

I shall now proceed to an examination of *Āryabhata's* age. *Āryabhata* was born in A.D. 476. This date is given, by himself, in the *Āryaśatāṣṭaka*, as follows:—

षष्ठ्यब्दागां षष्टिर्यदा वतीतास्त्रयस युगपादाः ।

अधिका विंशतिरब्दास्तदेह मम वयसो -तीताः ॥

Dr. Kern quotes a corrupt version of it from the Berlin manuscript. The correct translation is: "When three of the four Age-quarters and 60×60 [= 3600] years are past, then are past upwards of twenty-three years from my birth." This gives, for the birth of *Āryabhata*, the year A.D. 476; as the

¹ Journal of the American Oriental Society, vol. vi. p. 561.

fourth Age-quarter, or Kali Yuga, commenced 3101 years before Christ.

Strange to say, the commentator Someśvara understands the verse to mean that 3623 years had elapsed of the Kali Yuga at the birth of Āryabhaṭa. The commentator whom Mr. Whish consulted fell, perhaps, into the same error; as Mr. Whish does not appear to have given the exact date, but refers Āryabhaṭa simply to the beginning of the sixth century of the Christian era. Āryabhaṭa calls himself a native of Kusumapura, or Pāṭaliputra. Beyond a doubtful allusion to the Brahma Siddhānta, he never mentions any previous author, and rather prides himself on his originality. His work is written with great attention to conciseness. His system of notation is quite original. The account given of it by Lassen is not altogether correct. In the invention of a new system of notation, the Indian Āryabhaṭa may be compared to the Grecian Archimedes. The ratio of the diameter to the circumference was given, by Archimedes, in his book *De dimensione circuli*, as seven to twenty-two; while that of Āryabhaṭa is as one to 3.1416. Āryabhaṭa has the following notice of the Buddhist system of measuring time:—

कालपाद आर्या ९ उत्तरिणी युगार्ध पञ्चादशसर्पिणी युगार्ध च ।

मध्ये युगस्र सुवमा वादावन्ति च दुःषर्मेदुच्चात् ॥

This arrangement is different from that of Hemāchārya and other Jaina authorities. (See Appendix A).

II. VARĀHA MIHIRA,¹

as we have already seen, cites Āryabhaṭa by name in the passage given by Bhaṭṭa Utpala from Varāha's Pancha Siddhāntikā Karaṇa, quoted in his commentary on the Vārāhi Sanhitā.* The Pancha Siddhāntikā Karaṇa I have

¹ Varāha Mihira calls himself the son of *Ādityadēsa*, under whom he studied and obtained the highest gift from the Sun in Kapitthaka (a grāma, according to Bhaṭṭotpala), and an Āvantika, or native of Ujjayini. Bhaṭṭotpala calls him a Māgudha brāhmaṇa, or dvijavara (best of Brāhmaṇas), and Āvantikāchārya. Varāha's son was Prithuṣaṣa, who composed the Shatpanchāṣikā, on which also Bhaṭṭotpala has a commentary.

* The passage is given by Dr. Kern, Jour. Roy. As. Soc. vol. xx. p. 333.

as yet failed in recovering. Colebrooke¹ assigned to him the close of the fifth century of the Christian era, from a calculation of the position of the colures affirmed as actual in his time by Varāha Mihira. Since then no further solid data have been discovered to fix the era of this celebrated astronomer. I have failed to find out the date of his birth, but am glad to have discovered that of his death in a commentary on the *Khaṇḍa Khāḍya* of Brahmagupta, by Āmarāja:—

नवाधिकपंचशतसंख्यशके वराहमिहिराचार्यो दिवं गतः

“Varāha Mihira Āchārya went to heaven in the 509th [year] of the Śaka Kāla, i.e. A.D. 587.”

There is no reason to doubt the correctness of this statement.

The following passage, quoted by Bhaṭṭa Utpala, in his commentary on the *Varāhi Sanhita*, from a Tantra by Varāha Mihira, shows that he flourished after Śaka Kāla 427, i.e. after A.D. 505:

यथाचाहर्गणानयनं

सप्ताथिवेदसंख्यं शककालमपास्य चित्रशुक्लादी ।

अर्धास्तमिते भानी यवनपुरे भौमदिवसाख्ये ॥

मासीकृते समासे द्विष्टे सप्ताहतेष्टयमपथैः ।

लब्धैर्युतो धिमासिस्त्रिंशद्युक्तस्त्रियुतो धखः ॥

रुद्र * समनुशरो नो लब्धो नो गुणखसप्तभिर्दुग्धः ।

रोमकसिद्धांतो यं नातिचिरं पीलिशे थैवं ॥

The astronomers of Ujjayini place Varāha Mihira in the beginning of the fifth century. It is not unlikely that they have mistaken the Śaka Kāla for that of the Vikrama Samvat, or fallen into the same error as Albirāni.

Albirāni states that 526 years had passed up to his own date, A.D. 1031, from the date of the composition of the *Pancha Siddhāntikā* of Varāha Mihira;² which event must, therefore, be placed in A.D. 505. But in this he is evidently in error. Varāha Mihira adopted the epoch of the Romaka Siddhānta, for finding the number of civil or natural days (*Ahargana*);

¹ Colebrooke's *Misc. Ess.*, vol. ii. p. 482.

² *Journal Asiatique*, tome iv. 1844, p. 285.

and Albirānī or his informants have assumed this to be the date of Varāha's Pancha Siddhāntikā, which adopts the epoch of the Romaka Siddhānta.

Varāha Mihira, as we have seen, on the authority of Amarāja, died in A.D. 587, i.e. a century and eleven years after the birth of Āryabhata.

The so-called Khaṇḍa Kāṭaka of Albirānī is evidently Brahmagupta's Khaṇḍa Khāḍya; and Arcand is a corruption of Karaṇa.

From various considerations, the middle of the sixth century has been allotted to Varāha by Colebrooke, and by the learned American translator and commentator of the Sūrya Siddhānta. The passage I have quoted from Bhaṭṭotpala confirms these conjectures.

This calculation, it proceeds to tell us further, is that of the Romaka Siddhānta; and, judging by similar calculations and other Siddhāntas, it appears to me highly probable that the Romaka Siddhānta was composed in Śaka 427, or A.D. 505. Varāha Mihira founded his Pancha Siddhāntikā Karaṇa on the Romaka Siddhānta and four others. It is clear, therefore, that Varāha could not have lived before A.D. 505. In all likelihood, his birth was twenty or thirty years subsequent to this date; which would make Varāha Mihira about fifty or sixty years old at the time of his death in A.D. 587. In an essay on Kālidāsa,¹ I have attempted to show that the nine gems of Indian celebrity flourished at the Court of Harsha-Vikramāditya, at Ujjayinī, in the sixth century of the Christian era. As we have now established the date of Varāha Mihira beyond a doubt, my hypothesis that Mātrigupta is identical with the celebrated Kālidāsa gains further support.

The authors of the Pauliṣa, Romaka, Vāsishṭha, Saura, and Paitāmaha Siddhāntas being noticed by Varāha Mihira, it follows that they flourished before A.D. 505. Brahmagupta affirms that Śrīsheṇa, the author of the Romaka Siddhānta, bases his calculations on those of Lāṭa, Vāsishṭha, Vijayanandin, and Āryabhata, and that Viṣṇuchandra, following the same guides, wrote the Vāsishṭha Siddhānta. As we have the date

¹ Journal Bombay Branch Royal Asiatic Society, 1862, vol. vi.

of A.D. 508 for the Romaka Siddhānta, it is evident that Lāṭa, Vijayanandin, and Vasishtha flourished before that time. I presume that the Romaka Siddhānta was composed in accordance with the work of some Roman or Greek author; just as the Pauliṣa Siddhānta was composed from the work of Paulus Alexandrinus. Is not Lāṭāchārya also a foreign author? Bhaṭṭa Utpala notices also a strange author, of the name of Sphujidhvaja or Asphujidhvaja, as a Yavaneṣvara, who composed a new Śāstra before the Śaka era. His works appear, from the following passage,¹ to have been consulted by Bhaṭṭa Utpala, who remarks that Varāha Mihira consulted the works of other Yavana authors not available to himself. I believe the word Sphujidhvaja is a corruption of the Greek name Speusippus. Diogenes Laertius mentions two authors of this name, one of whom was a physician called Herophilus Alexandrinus, and may, possibly, be the astronomer whose works were translated and studied in India.

Varāha Mihira's knowledge of Greek technical astronomical terms and doctrines has been fully treated of by Weber and others. The verse in which he gives the Greek terms for the Sanskrit names of the signs of the Zodiac, has hitherto been presented to us, except by Mr. Whish, in a corrupt form;² as the following will show that the last puzzling word is the veritable Greek *Ἰχθύες*, or *Pisces* :—

क्रियतावुदुतुमकुलीरलेयपार्थेनबूककोर्यास्त्राः ।

तीचिक आकोकिरो इद्रोगद्येत्यसिः क्रमशः ॥

I have failed, as yet, to discover the Pauliṣa and Romaka Siddhāntas. I have two old copies of a Romaka Siddhānta; but it is, evidently, a modern production, taken from some Arabian author, and having nothing in common with the citations and references to the older Romaka Siddhānta preserved in the works of Varāhamihira, Brahmagupta, and Bhaṭṭotpala.

¹ यवनेश्वरेणास्फुजिध्वजेनान्यत् शास्त्रं कृतं शककालस्य प्राक् ज्ञायते
अनुयवनाचार्यैः पूर्वं कृतमिति तदस्फुजिध्वजोऽप्याह ।

² See Journal As. Soc. Bengal, 1845, p. 810.

III. BRAHMAGUPTA

has given his own date in the *Brahmasphuṭa Siddhānta*. I gave this extract in my *Essay on Kālidāsa*, three or four years ago; but it has escaped the attention of one of our ablest and most accurate scholars.¹

श्रीचापवंशतिलके श्रीव्याघ्रमुखे नृपे शकनृपाब्दात् ॥ पंचाशत्संयुक्तेर्वर्षश-
तः पंचभिरतीति ॥ १ ॥ ब्राह्मः स्फुटसिद्धान्तः सञ्जनशतितगोलवित्प्रीति
॥ विशद्वर्षेण कृतो विष्णुसुतब्रह्मगुप्तेन ॥ २ ॥ अध्याय २४ चार्या ७-८

"In the reign of Śrī Vyāghramukha, of the Śrī Chāpa dynasty, five hundred and fifty years after the Śaka King (i.e. Śālivāhana, or A.D. 628) having passed, Brahmagupta, the son of Jishnu, at the age of thirty, composed the *Brahmagupta Siddhānta*, for the gratification of mathematicians and astronomers" (chap. 24. *Āryās* 7-8).

IV. BHATTA UTPALA'S

age has been quoted from his work by Colebrooke and others :

फाल्गुनस्य द्वितीयायामसितायां गुरोर्दिने ।
बख्शष्टमिति शके कृतेयं विवृतिर्मया ॥

V. BHĀSKARA ĀCHĀRYA

has stated, in his *Siddhānta Śiromaṇi*, the date of the composition of his work as follows :—

रसगुणपूर्णमहीसमराब्दं नृपसमये भवत्यमोपतिः ॥
रसगुणवर्षेण मया सिद्धान्तशिरोमणी रचितः ।

This date has been singularly confirmed by an inscription which I discovered, some years ago, in the neighbourhood of the railway station of Chalisgam, about seventy miles beyond Nassik. This inscription gives also the names of several of Bhāskarāchārya's descendants, who taught his works in a college endowed in the neighbourhood of Chalisgam, at the foot of the hills which contain the Peetulkhora caves. (See Appendix B.)

¹ Professor Max Müller, Preface to the *Rigveda*, iv. pp. xiv. f.

Remarks on the inscription referred to in p. 410, and given at length in Appendix B.

In this inscription we have the names of the following kings of the Yadu dynasty: Bhillama, Jaitrapāla, and Singhana. Under this dynasty is the following genealogy of subordinate chiefs of the solar race: Kṛṣṇarāja, his son Indrarāja, his son Govana, and his son Sonhadeva. This last makes a grant of certain privileges, in the shape of perquisites, or first-gifts, to a college established by Changadeva, (within six miles of the railway station at Chālisgām, and at the foot of the Pitalkhorā caves), now entirely deserted and in ruins, in the year 1128 Śaka-kāla, i.e., A.D. 1206, on the occasion of a lunar eclipse.

Changadeva was the son of Lakshmīdhara, who was patronized by Jaitrapāla, as the chief of his Pandits. Lakshmīdhara's father was the celebrated Bhāskarāchārya. His father was Kaviśvara Māheśvarāchārya; and his father was Manoratha; his father, Prabhākara; his father, Govinda Śarvajña; his father, Bhāskara Bhaṭṭa, to whom Bhoja gave the title of Vidyāpati. His father was Trivikrama. This learned family, we are further told, belonged to the *gotra* of Śāṇḍilya.

The names of Bhillama, Jaitrapāla, and Singhana occur in two copper-plate grants, Nos. 9 and 10 of Mr. Wathen's series (Journal of the Royal Asiatic Soc. v. pp. 178, 183). In these grants we have also the names of the successors of Singhana, i.e., Kṛṣṇa, Jaitrapāla (Singhana's son), his younger brother Mahādeva, who succeeded him, and Rāmachandra, the son of Kṛṣṇa, the dates of whose grants are Śaka 1212 and 1194. The donor, Sonhadeva, in our inscription, dated Śaka 1128, is a contemporary and subordinate of Singhana, whose third lineal descendant was Rāmachandra, in whose reign the grants of Śaka 1212 and 1194 are dated.

These dates, therefore, are perfectly compatible with, and confirmatory of, the accuracy of that of the inscription.

Bhāskarāchārya, the author of the Siddhānta Śiromani, gives the date of his birth as follows:

रसगुणपूर्णमहीसमशकनृपसमये ऽभवन्ममोत्पत्तिः ।

रसगुणवर्षेण मया सिद्धन्तशिरोमणी रचितः ।

"In the year 1036 of the Śaka king, I was born ;
And at the age of 36, I composed the Siddhānta Śiromaṇi."

This date is quite in accordance with that of the inscription.

The following lines, in praise of Bhāskarāchārya's accomplishments, are sometimes to be found added to MSS. of the *Līlāvatī* :

अष्टौ आकराणि षट्च भिषगां आचष्टवः संहिताः षट्कर्तुं गति-
तानि पञ्च चतुरो वेदानधीते च यः । रत्नाणां चित्तयं द्वयं च बुबुधे मी-
मांसयोस्त्वरं सत् ब्रह्मैव जगद् गायमहिमा सोऽस्माः कविर्भास्करः ॥

An important fact to be noticed is, the bestowal of the title of Vidyāpati on Bhāskara Bhaṭṭa, an ancestor of Bhāskarāchārya, by Bhoja.

This Bhoja is, undoubtedly, the monarch of Dhārā, whom it is the fashion to speak of as distinguished for his patronage of learning.

In the *Rāja Mrgāṅka Karpā*, attributed to Bhoja, a copy of which was brought to me, by my Pandits, from Jessulmere, whither I sent them in search of Jaina MSS. two years ago, its author recommends 964 to be subtracted from the Śaka era to find the *Ahargana*, *i.e.* "the sum of days," in civil reckoning.

Bhoja, therefore, it follows, flourished in $964 + 78 = 1042$ A.D. At the end of the work he is called *Raja Ranga Malla*, a title also to be found in the *Pātanjala Yoga Sūtra Vṛtti*.

My pandits have succeeded in getting a very imperfect copy of the *Tilaka Manjari* of Dhanapāla, who is said by Merutunga, the author of the *Prabandha Chintāmaṇi*, to be the author of that work, and to have been a favourite of Bhoja. Merutunga adds that from *Vikrama Samvat* 1076, or A.D. 1019, Bhīmarāja reigned. He was succeeded by Karna in 1028. At the time the Chālukya Bhīma reigned in Gujerat, Bhoja says Merutunga ruled in Mālava. According to this Jaina hierarch, Munja was imprisoned by Tailapa, the Chālukya, who commenced his reign in Śaka 895, or A.D. 873, according to the copper-plate grants of Mr. Waddell. Dhanapāla was a Brāhmaṇa, but, evidently, a Jaina by faith. He composed the *Jina Stavans*, or *Gāthās* in *Māgadhī* in praise of Jina,

of which a complete copy was brought me from Jessulmere. The Jainas are loud in the praises of Dhanapāla.

Mr. Bentley speculated that Bhāskarāchārya flourished after Akbar the Great. Our inscription furnishes a new proof that the unfavourable opinion of Hindu veracity which led to this conclusion was utterly unfounded.

APPENDIX A.

"We will now proceed to inquire how far the doctrines of our treatise correspond with what has elsewhere been handed down as taught by Āryabhaṭa. The peculiar division of the Great Age (*mahāyuga*) and constitution of the *Æon* (*kalpa*), described by Brahmagupta (see Colebrooke, as above) as Āryabhaṭa's, are here given. The treatise begins the *Æon* with sunrise at Lankā, a tenet which distinguished the school of Āryabhaṭa from that of Pulisa (see Colebrooke, as above; also Essays, ii. 427, et al.) It affirms the revolution of the earth on its axis, and the non-reality of the apparent daily motion of the stars, comparing this to the effect of riding in a chariot when fixed objects seem to be moving in a direction contrary to that in which the chariot is proceeding (see the reference to this point in Mr. Hall's paper). It declares the moon, planets, and stars to be naturally dark, and only illuminated upon the side which is turned toward the sun (see Colebrooke, Hind. Alg., note G; Essays, ii. 467). The variability of dimensions of the epicycles of the planets is recognized, although the agreement between this treatise and the Sūrya Siddhānta herein is not so close as Colebrooke (As. Res. xii. 236, Essays, ii. 401) seems to have understood it to be: perhaps Colebrooke's reference here belongs rather to the other Ārya Siddhānta. The passage repeated by Colebrooke (Hind. Alg., note I; Essays, ii. 473) from Bhaṭṭa-utpala on Varāha-mihira is almost precisely represented by the first verse of our third *pāda*: its evidence, however, is of little account, as it relates to a matter so general that it might occur in nearly equivalent terms in almost any treatise; Colebrooke is mistaken in attributing it to any necessary connection with the doctrine of the precession: the position of the equinoxes would be described by a Hindu astronomer as in the first of Aries and of Libra, whatever his theory respecting the important fact of their movement along the celestial. The doctrine respecting the precision attributed to Āryabhaṭa by

Munṭavara and others (see Colebrooke, *As. Res.* xii. 213; *Essays*, ii. 378, et al.), namely, that the equinoctial points librate 578,159 times in an *Āyon* (*kalpa*) through an Arc of 48° , appears from Bentley (*Hind. Ast.* p. 140, etc.) to belong to the more extended treatise, and not to the *Laghu Ārya Siddhānta*. In connection with the latter, Bentley makes no mention of the precession, nor have we as yet succeeded in discovering anything about it in our treatise, although we would not venture to say with entire confidence that it is not there. It seems, then, altogether probable that Colebrooke's suggestion (as above) is well-founded, to the effect that the libration of the equinoxes may be taught in the *Āryāśṭaṣṭaka*, and not in the *Daśagitikā*, although we cannot regard as of force the particular reason he assigns for it, since the equinoxes are by no means likely to have been treated as nodes by the early astronomers. A scholiast upon the *Vārāhi Sanhitā* ascribes to Āryabhaṭṭa (Colebrooke, *As. Res.* xii. 244; *Essays*, ii. 410) the determination of Jupiter's revolutions in a Great Age (*mahāyuga*) as 364,224; this is the number given in our treatise, and in Bentley's *Laghu Ārya Siddhānta*; that found in his *Ārya Siddhānta* is 364,219,682."—*Journal of the American Oriental Society*, vol. vi. pp. 562-3.

APPENDIX B.

१ नमो गणाधिपतये सिद्धि सुधाकरभूमि

स्वच्छं च संरक्षणानि गगनेचरवासीतः उल्लटबुद्धिर्भाट्टे सांख्ये संख्यः
स्वतंत्रधीस्त्वै । वेदे नवविकीर्णः नव्यः शिल्पादिषु कलासु ॥ १ ॥ स्वच्छं
दोषं च कंदसि शास्त्रे वैशेषिके विशेषज्ञः । यः श्रीप्रभाकरसमः प्राभाकर-
दर्शने कविः काव्ये ॥ २ ॥ बह्वर्णगणितप्रभृतिस्त्वंधितये चिनेचसमः ।
विबुधाभिवंदितपदो जयति श्रीभास्कराचार्यः ॥ ३ ॥ श्रीमद्बुधेशाय
स्वस्वस्तु समस्तवस्तुसहिताय । विभं यत्र जातुं जातो विष्णुः स्वयंचक्षुः ॥
४ ॥ नर्वर्जुर्जरकुंजरोत्कटघटासंघट्टकंठीरवो लाटोरस्तकपाटपाटन-
पटुः कर्णाटहत्कटकः । श्रीमाग्निह्वयभूपतिः समभवद्भूपालचूडामणिः
चक्षार्तांध्रपुरंध्रिकांत सुखहृच्छ्रीजीवपालो भवत् ॥ ५ ॥ लक्ष्मीकांतसवः
प्रतारितभवः श्रीजीवपालोद्भवः संग्रामांगणसंचितातिविभवः शास्त्रा-
भुवः सिंघणः । पृथ्वीशो मयुराधिपो रणमुखे काशीपतिः पातितो येना-
स्त्वपि यस्त्वभुलबहुना हम्मीरवीरो जितः ॥ ६ ॥ अवततार पुरा पुरुषो-

समो यदुक्ते जगतीहितहेतवे । अयति सोऽयमिमां सकलामित्यामव-
ति मामसिद्धमहीपतिः ॥ ७ ॥ अथ भृत्यान्वयवर्णनं ॥ श्रीमन्नास्करवं-
शाय भव्यं भूयात्स भूपतिः । निकुंभो यत्र संभूतो रामो यस्यान्वयेऽभवत्
॥ ८ ॥ तत्रासीत्पतिर्जितचित्पतिर्धातैकलक्षोपतिर्देवब्राह्मणवंदने त-
तमतिः श्रीकृष्णराजाह्वयः । श्रीर्यौदार्यविवेकविक्रमगुणैस्तुल्यो न ये-
नापरः प्रीत्या पांडवपुंगवार्जितपदं तद्धर्मराजिति यत् ॥ ९ ॥ प्राप्तां-
गप्रभवस्ततस्ततमतिः प्राप्तप्रतापोन्नतिर्वीरो वैरिवधूविधूनिताशिरा यः
श्रीन्द्रराजाह्वयः । तस्मासीत्तनयः सतां सविनयः सामंतसीमंतिनी-
वैधव्यव्रतसन्नुर्गुरुगुणः सत्पुण्यपस्थापणः ॥ १० ॥ चतुरस्रुरगाह्वो रे-
वंत इव गोवनः । सोन्दर्यदर्पः कन्दर्पो यं वृद्धानंगतां गतः ॥ ११ ॥ श्रीगो-
वनाद्रलसिंधोरुद्रुतमूर्तिस्तपुष्यकीर्तिः । जितारिचक्रः क्षितिपाल-
शक्रः श्रीसोन्हदेवः सुतवासुदेवः ॥ १२ ॥ शरणागतवस्त्रपंजरः परना-
रीषु सदा सहोदरः । व्रतसत्त्वपथे युधिष्ठिरः सततं वैरिवधूभयञ्जरः ॥
१३ ॥ स षोडशशतयामदेशं दुर्गपुरान्वितं । सोन्हदेवे दिवं याति शाखि
तस्यानुसंभवः ॥ १४ ॥ त्यागे सूर्यसुतोपमोऽर्जुनसमः श्रीर्यै निकुंभान्वये
विख्यातः क्षितिपालभामतिलकः श्रीगोवनस्मात्मजः । श्रीमत्सिंघणदे-
ववैरिकरटी कंठीरवो यत्करो नंबाभ्रंदमुनंदने ततमतिर्हेमाडिदेवशिरं
॥ १५ ॥ शांडिल्यवंशे कविचक्रवर्ती चविक्रमोऽभूत्तनयोऽस्य जातः । यो
भोजराजेन कृताभिधानो विद्यापतिर्भास्करभट्टनामा ॥ १६ ॥ तस्माद्वो-
विंदसर्वज्ञो जातो गोविंदसन्निभः । प्रभाकरः सुतस्तस्मात् प्राभाकर
इवापरः ॥ १७ ॥ तस्मान्ननोरथो जातः सतां पूर्णमनोरथः । श्रीमान् स-
हेचराचार्यस्ततोऽग्नि कवीश्वरः ॥ १८ ॥ तत्सूनुः कविवृंदवंदितपदः स-
हेदविबालताकंदः कंसरिपुप्रसादितपदः सर्वज्ञ (विप्रासदः) । यच्छिष्यैः
सह कोऽपि नो विवदितुं दक्षो विवादी क्वचित् । श्रीमान् भास्करकोविदः
समभवत् सत्कीर्त्तिपुष्पान्वितः ॥ १९ ॥ सत्कीधराख्योऽखिलसूरिमुखो
वेदार्थवित्तार्किकचक्रवर्त्ती । कतुकियाकांडविचारसारी विशारदो
भास्करनंदनोऽभूत् ॥ २० ॥ सर्वशास्त्रार्थदक्षोऽयमिति मत्वा पुरादतः ।
क्षिपपालेन यो नीतः कृतश्च विनुधापणीः ॥ २१ ॥ तस्मात्सुतः सिंघणचक्र-
वर्त्ती देवचवर्त्योऽग्नि चंद्रदेवः । श्रीभास्कराचार्यनिबद्धशास्त्रविचार-

हेतोः कुर्वते मठं चः ॥ २२ ॥ भास्कररचितसंघाः सिद्धांतशिरोमणिप्र-
मुखाः । तद्वत्प्रकृताद्यानि आख्येया मन्त्राणि नियतम् ॥ २३ ॥ श्रीसोमहृ-
देन मठाय दत्तं हेमादि (वा किंचिदिहापरैश्च) भूत्वादि सर्वे परिपाक-
नीयं भविष्यभूषिर्वैष्णवपुष्पवृक्षैः ॥ २४ ॥ स्वसि श्रीशके ११२८ प्रभवसंव-
त्सरे श्रीआवसे मासे पौर्णमास्यां चंद्रग्रहणसमये श्रीसोमहृदेन सर्व-
जनसन्निधौ हस्तोदकपूर्वकं निजगुह्यरचितमठायास्यज्ञानं दत्तम् ॥ न-
ववा

इहां पाटली जे कसे उघटे तेहावा की सिद्ध की राखला होता सोहवा
पासी तो मठा दिन्हवा ब्राह्मणजैदिकहे ब्रह्मोत्तरतं ब्राह्मणीदिन्हवे ॥
आहकापासिं हामावा कीसोवा असु पाटी निधवयाहकापासि ॥ पंचपौ-
षणीयाहकापासि पहिवहिले आधये आदावा कीसो मठा दिन्हवा
जैनिघासे वाहति तैतियां प्रतिपसि पक्षी तेका । जेनविजेने मठीचे नमाच
नवावे मापा उमठा चर्च चर्च मापाचे हारिभूपाचे सुक तथा मूमिः चतु-
राधाटविमुड ३०६ याम —वाले कामतामध्वर वा कव पंडिता-
कासु भीचकरा धामीजीकीसोडीया ॥

TRANSLATION.

Obeisance to the god of wisdom (Gaṇādhīpati)—four or five syllables lost—perfection—four syllables lost—moon and earth—about twenty-five syllables lost. Stha—two syllables lost—dū—one syllable lost—tra—preservations—the planets and stars¹—three syllables not well made out.

Glory to Bhāskarāchārya, eminently skilled in Bhāṭṭa,² estimable in Sāṅkhya, original in the Tantra, deeply conversant in the Vedas, great in the mechanical arts, independent in poetical metre, intimate with the Vaiśeṣhika Śāstra, like Prabhākara³ in the Prabhākara system, a Kavi in poetry, like the three-eyed god (Śāmba) in the three subtle sciences, such as mathematics,⁴ whose feet are bowed to by the learned.

Peace to the prosperous Yadu dynasty, with everything appertaining to it; (a dynasty) in which, for the preservation of the world, the independent Vishṇu assumed being.

¹ Gaganacharya.

² The Mīmāṃsā as propounded by Bhāṭṭa Kumārila.

³ In the Mīmāṃsā Śāstra. Prabhākara and Mūrāri Miśra were the founders of two other schools, besides Kumārila Bhāṭṭa.

⁴ The three sciences (Śāndhas) are Gāṇita, Horā, and Sanhitā.

In it the illustrious King Bhīllama flourished, who was a lion attacking the furious masses of noisy Gurjara King-elephants, who was skilful in bursting the powerful breasts of the Lāṭas, a thorn in the heart of the Karmāṭas, and a crown-jewel among kings; Jaitrapāla flourished, who was the destroyer of the happiness of the Āndhra females with their husbands.

A portion of the Lord of Lakṣmī, who escaped (or saved himself), from the world, descended from Jaitrapāla, (and) who gained the utmost power on the field of battle, a controller of the earth, —Singhāṇa; who in the van of battle threw down the lord of Mathurā, the king of Benares; a young child of whose servant defeated the warrior Hammitra. Formerly Purushottama (Vishṇu) for the benefit of the world became personified in the Yadu family. He (Purushottama) conquers all the world and protects me. Now the description of the subordinates. May blessings attend the illustrious solar race, in which the king Nikumbha was born, whose descendant was Rāma. Of this race was the king Kṛṣṇarāja, a conqueror of kings, devoted solely to the Lord of Lakṣmī; whose mind is expanded in revering gods and Brāhmaṇas, who has no equal in the qualities of bravery, liberality, discrimination, and prowess; and who by love (gained) the title of Dharmarāja, possessed by the best of the Pāṇḍavas. From him (Kṛṣṇarāja) Indrarāja obtained his bodily descent, who was of large intellect exalted by prowess, a hero who filled the heads of the wives of his enemies with terror. His son, discreet among the virtuous, and a high-priest to give the vow of widowhood to the wives of feudatories, whose qualities are exalted, a store-house of merit, clever on horseback like Revanta, was Govana; on seeing whom, Cupid, who is proud of his beauty, abandoned his bodily form.

From Govana, the ocean of jewels, issued Sonhadeva, the praise of whose merit is wide-spread, who conquered the circle of enemies, an Indra among kings, who praises Vasudeva, a castle of adamant to those who sought his protection, who looked upon others' wives as his sisters, a Yudhisṭhira . . . in vows and in the path of truth, and ever a fearful fever to the wives of his enemies.

His younger brother, Hemādideva, rules a country of 116 villages,¹ with forts and towns, since Sonhadeva went to heaven;² in liberality like the son of the Sun (Karna), in bravery like Arjuna, celebrated in the race of Nikumbha, the mark on the forehead of kings (i.e. chief among kings?), the son of Govana, whose hand is a

¹ Caste, in the original.

² Or 1600 villages.

³ The following adjectives are equally applicable to the brothers Sonhadeva and Hemādideva.

him to the highest eminence of Sanskrit, whose mind is expanded in the great sea of Vedic Kratut may he be happy for a long time.

In the Śākhya family was *Yatindra*, best of poets. His son was *Śaṅkara-kṛatū*, to whom *Śaṅkara* gave the title of *Vidvān*. From him was *Govinda-svayā*, *Āra Govinda*. From him was a son *Prabhākar*, as if he was another son. From him was *Manuśā*, a follower of the wisdom of the virtuous; from him was the great poet *Mahāśarāṅgārya*, whose feet are embraced by assemblages of poets, a bull of the excellent crop of the essence of the Vedas, was adorned the favour of the feet of the enemy of *Kaṇva Kratū*, who has a son among or who has conquered the Brahmins with universal knowledge, with whose disciples there is a where any person is āgata. Full of good fame and merit was *Śaṅkara*. The learned *Śaṅkara*'s son was *Lakṣmāṇārya*, the first among the learned, acquainted with the meaning of the Vedas, the first among metaphysicians, and abiding in the knowledge of sacrificial ceremonies. *Jatayā*, having recognised him as well-versed in the meanings of all the Śāstras, took him from the four rivers and made him the chief of *Pañḍita*. His *Lakṣmāṇārya*'s son was *Chandrapāra*, the best of the astronomers and astrologers in the court of *Maṅghara Chakrapāra*. He (*Chandrapāra*) constructed the college *Māta* for the spread of the treatise composed by *Mahāśarāṅgārya*. The works composed by *Mahāśarāṅgārya*, the chief of which is the *Sādhana Samudāya*, and the works of his ancestors and descendants, ought to be duly studied in my college. *Saṅkara* granted ground, with gold, etc., to the college; others have also made some grants. Future kings ought to protect this, for the increase of merit. The syllable as between two syllables follows *arata*. In the year 1124 *Arata* in the year *Pratibha*, in the vibrant month, full moon, on the occasion of a lunar eclipse, *Saṅkara*, in the presence of the people, having thrown water into the hands, granted to the college of his progenitors as follows. The succeeding portion is mostly written in a form of old *Marathi*, corresponding to the *Khanda*. This is more difficult to make out than *Sanskrit*; but the purport appears to be: certain taxes were levied on the oil-mills, sugar manufactories, on the toll revenue collected, and on the cart, for the support of the college. Again in *Sanskrit* in the same way, ground distinguished by the four boundaries 300 ². Villages again *Khanda*—two syllables lost—some letters have not been made out. *Pañḍita*—change of ground. . . *Itamoy's ground* ².

A syllable for the word *Arata* is placed, but here is evidently intended to mean the four gifts. *Aratāra*.

ART. XV.—*Outlines of a Grammar of the Malagasy Language.* By H. N. VAN DER TUUK.

[Read May 1st, 1865].

INTRODUCTION.

I. The Malagasy belongs unquestionably to the stock of languages which have been denominated *Malayo-Polynesian*, and more particularly to the great Western Branch, which comprehends the languages of the lank-haired races of the Indian Archipelago and the Philippines, and which we shall call *Malayan* (from the most predominating language in that part of the globe), to distinguish it from the Eastern Branch, which may be called *Maorian* (from the Maori of New Zealand), the geographical term *Polynesian* having the disadvantage of not excluding the languages of the crisp-haired races. The Malagasy bears the greatest analogy to the Toba dialect of the Batak in pronunciation (III), and many salient points¹ in its grammatical structure may be pointed out (IV) to prove its affinity to Javanese, Batak, Malay, Duyak,² and other Malayan tongues. The words, common to many of these, have not been derived from the languages of the two most civilized and formerly enterprising nations of the Indian Archipelago (the Malays and Javanese), as the following small list of words, not existing either in Javanese or Malay, and taken at random, will suffice to prove:³—

1. Bee, *uwani* (Batak), *báni* (Mangkasar), *awáni* (Bugis), *fáni* (Timor and Rotti), *áni* (Bima).
2. Black, *wúring* (Harafura of Menado), *búring* (Dayak, charcoal).
3. Forest-leech, *limátok* or *limáték* (Batak), *limátik* (Tagal).
4. Satiated, *bósur* or *bésur* (Batak), *wésu* (Menado Harafura and Sangar).
5. Ghost, *nutu* (Batak and Timor), *anito* (Tagal and Bisaya), *lito* (Favorlang on Formosa), *(si-)nitu* (Mantáwey).

¹ Against Crawford's Dissertation, p. 4.

² Of which only the *Ngayu* is sufficiently known.

³ Against Crawford, l. 1. p. 7. below.

6. Bananas, *óntsi*¹ (Malagasy), *ínchim* (Batak, wild bananas), *únti* (Mangkassar), *punti* (Sumbawa and Sangar). The cultivated banana is called *gdol* in Toba, on account of the vibration of the *l*, properly the same as *galo*, as in the language of Bima, and *gáluh* in the Dairi dialect of the Batak.
7. To steal, *tákko* or *tangko* (Batak), *tákow* (Dayak).
8. Rat, *voaláro* or *valáro*² (Malagasy), *bláwou* (Dayak), *baláwo* (Mangkassar).
9. Salt, *stra* (Malagasy and Batak), *siya* (Sasak, on the island of Lombok, Sangar, and Bima).
10. Mouth, *baba* or *babah* (Batak), *bawa* (Nias), *vava* (Malagasy).
11. Foot, *néhe* (Dairi), *ne* (Sumbawa).
12. Foot, *gác* (Nias), *kác* (Dairi, thigh), *hác* (Toba, the lower part of a land towards the sea, *hác-hác*, thigh).
13. Nine, *siwah* or *siya* (Batak), *sivy* (Malagasy), *hiwa*, *ioa*, etc (Maorian).

Observation.—Many words besides, which might be considered Javanese or Malay, have more complete forms in the other Malayan languages; which puts it beyond all doubt that they have not passed through those channels. A striking example is the word for earthquake, which in Javanese is *lindu* (in the Malay of Batavia *linu*, and in the Balinese *linuh*), whereas Sangar has yet *lindur*, Tagal *lindol*, Bisaya *lindog*, and Dairi *rénur*.³ Other words have the changed form of another language than Javanese: *e.g.*, *sófiná* (ear)=*súping* (Batak), *kúping* (Javanese).

II. The words which appear to Crawford "most fit to test the unity of languages are those indispensable to their structure; which constitute, as it were, their framework, and without which they cannot be spoken or written: as, for instance, the prepositions representing the cases of more complex languages, and the auxiliaries to express tenses and moods." Not finding similarity in them, he is led to suppose that the Malayan languages are no sister tongues, but distinct languages. Here Crawford has overlooked the fact that such words in kindred languages *seem* very often to be different to

¹ o as u in German and Italian.

² v as w in Dutch.

³ nd often = n as medial (compare the last word in III. 1).

a person who neglects the grammar, and satisfies himself with looking over vocabularies. Would not a man, not well acquainted with the Teutonic languages, infer from *but*, *maar*, *sondern*, and *to*, *naar*, *zu*, etc., that English, Dutch, and German are no kindred languages? Such words *seem* different, because they are very liable to different applications; thus, for instance, the preposition *ka* in Malay (*to* a place) does not exist as a preposition either in Batak or Malagasy, but only as a prefix; v.g. *ka-darat* (Batak), *to step to the wall* of a bathing place, *to go on shore*, said of a person bathing, *ka-tratra* (Malagasy), *up to the breast* (*ka*=*ka*, see III. 1). We need not examine all these words to come to the result that they are originally the same, and only differently applied, some of them being still used in the same way; thus, for instance, the preposition *at*, *in*, is in Malay and Batak (Toba and Mandailing) *di*, in Mangkasar and Bugis *ri*, in Dairi Batak *i* (in Javanese closed with a nasal *ing*); *of* is in Tagal, Bisaya, Malagasy, and Batak still *n*; *to* is in Toba, Mandailing, and Favorlang *tu* (Dayak *mtu*); *si* is in Dairi the relative pronoun, and takes sometimes a closing nasal before the following word (*simpèra*: what is dry), whereas in Javanese it is *sing*; *si* is both in Mangkasar and Dairi the particle of unity (*sikarang*, one moment, etc.).

III. Striking peculiarities of the Toba and Malagasy in pronunciation are:—

1. An *h*, as initial or medial, where another Malayan language has *k*; v.g. *hólutra*¹ (Malagasy) fungus=*kulat* (Malay); *hala* (Malagasy and Toba) scorpion=*kula* (Malay from the Sanskrit); *hízo* (Malagasy) tree, wood=*hiyu* (sub-Toba and Mandailing), *hiu* (Toba), *kayu* (Malay, Javanese, Dairi, etc.); *táhotra* (Malagasy) dread=*táhut* (Toba *ma-tahut*, to be afraid), *takut* (Malay); *hámtra* (Malagasy) a pointed iron, a spit=*káuit* (Bisaya) a crook, a hook, *kiét* (Malay), *kaui* (Dairi), *huit* (Toba and Mandailing); *handrina*² (Malagasy) forehead=*káning* (Malay, in Menangkabow it means eyebrow).

¹ The vowel of the final syllables *tra*, *na*, and *ku*, is but slightly rounded, and in some dialects of the Malagasy dialect.

² *n* as *ng* in *finger*, *ng* being pronounced as *ng* in *finger* (in Malay, etc., words represented by *ngg*), see also I. Observation, in note 3.

2. A *k* as medial in Malagasy = *kk* in Toba, where Malay, Javanese, or any other kindred language has *ngk*; v.g. *tóko* (Malagasy) trivet = *túngku* (Menangkabow); *vakúan*¹ (Malagasy) a screw pine, *pandanus* = *bakkuwang* (Toba pronunciation of the Dairi *béngkuwang*), *bangkúwang* (Menangkabow), *mángkúwang* (Malay).

3. A final *k* in Malagasy and Toba becomes *h* before the vowel of a suffix; v.g. *ulóhon* (Toba) eaten by the worm, from *úlok* and *on*; *iráhiná* (Malagasy) being sent as a messenger, from *irakt* and *indá*.

4. A final *n* in Malagasy causes an initial *h* to be changed into *k*, and sometimes into *tr*; v.g. *olon-kafa* or *olon-trafa* (stranger), from *ólond* (man), and *hafa* (strange). In the same way we find in Toba *tiak-kúta* (from the fortified village), from *tian* (from) and *huta* (the Sanskrit *kuta*, see 1), and *tittittu* (my ring) from *tittin* (ring), and *hu* (suffix, mine). In the Mandailing an initial *h* is changed always into a *k* by a preceding final consonant; v.g. *tingon kuta* (= *tiak-kúta*) from *tingon* = *tian*, and *huta* (in South Mandailing pronounced *uta*).

5. In Malagasy *ts* is put instead of initial *s* by the influence of a final consonant; v.g. *láláná sárotrá* becomes *lalantsárotrá*. In Toba we have *tiatsaba* (from the rice field) out of *tian* + *saba* (rice field). In the South Mandailing and Dairi an *s* is pronounced nearly as *ch* in English (child) after a final *n*; v.g. *ránchang* (orthography *ransang*).

Observation.—Although every Malagasy word terminates with a vowel, a great many words derived by the aid of a suffix, as, for instance, *indá* and *aná* (corresponding respectively with the Toba suffixes *on*¹ and *an*), show an inserted consonant (*v*, *z*, or *s*), which is sometimes only to be explained by comparison with a language, wherein words terminating with a consonant are frequent. Thus, for instance, the Malagasy root *nify* (*ma-nify*, thin) is precisely the same word as the Malay *nipis*, as is evident from the derived *hanifisindá* (what is made thin). The Malagasy, like the Toba, not having the semi-vowel *y*, represents it very often by *z* (see

¹ Kawi and Javanese *én*, Tagal *in*.

hazo in 1. and § 1 a). From this we see words wherein an inserted *z* corresponds with a *y* in Malay; v.g. *sahúzan* (a gridiron), from *sály* (roasted). Now *sály* in Malay is *sáley* (*mañáley*, to cure or dry by smoke or the heat of fire), and this *sáley*, with the suffix *an*, becomes *saláyan* (which would signify where the curing takes place). Compare the Observation in VI.

IV. The salient points in grammatical structure which the Malagasy has in common with the other Malayan languages, are:—

1. The use of the prefix *mi*, mostly to form intransitive verbs (*mi-ala*, to go out), and occasionally to form transitive verbs (*mi-vidy*, to buy). The same obtains in Batak, with the prefix *mar* (Dairi *mër*); v.g. *marhóda* (Dairi *merhúda*) to be on horseback, *margadís* (Toba) to sell=*mërdeya* (Dairi). The prefix *mi* (Batak *mar* or *mër*) is in Tagal and Bisaya *mug*, in Malay *bur*, in Dayak *bara*, in Iloco *ag*, in Mangkasar *aq*,¹ (*q* not fully sounded), in Kawi *ma*, and in Javanese *a* (see below, p. 443, I).

2. The prefix *ma* closed with a nasal forms mostly transitive verbs, as in Malay, Batak, Kawi, etc. The nasal, in some cases, to be stated below, causes the initial consonant of the root to disappear; v.g. *manóratrá* (to write) *mañurat* (Malay), *manúrat* (Toba), from *sóratrá* (Malay and Batak *súrat*).

3. The substantives with an active sense are derived from the verbs by the change of the initial *m* into its sharp mute (*p* in Batak, Kawi, etc., and *f* in Malagasy); v.g. *pambuwat* (Batak), 1, the taking of anything in a certain way; 2, taker, who takes something; from *mambuwat* (to take); *fanála* (Malagasy) *pan-ñuwat*, (1) *mpanála*=*pambuwat*, (2) from *manála*=*mambuwat*.

4. The passive is made in Malagasy as in the other Malayan languages, by the omission of the nasal; the initial consonant of the root, if lost by its influence (2) re-appearing; as, for instance, the passive verbal noun of

¹ See *Opmerkingen naar aanleiding van eene taalkundige bijdrage van den Hoogleraar Koorda*, p. 36

manápaka (to break) is *tapáhiná* (III. 3). In the other languages the same takes place; v.g. *timbágon* (passive verbal noun), from *manimbang* (to weigh), from *timbang*.

5. A peculiarity of the Malagasy worth noticing is the use of a preposition before a substantive, not with the sense of an adverb, as might be supposed, and is really also the case (*andahitrá* in heaven), but very often to designate the proper name of a place as a real substantive; as, for instance, we have *Ankova* (the country of the Hova tribe) although it is composed of *aný* (at, in, etc.) and *Hova* (name of a now predominating lank-haired tribe of the island), and should signify in the Hova, or at Hova. The same is to be seen in Javanese, v.g. *ngayódya*, out of *ing Ayódya* (lit. at Ayodya), the ancient name of the Indian Oude; the Sanskrit *Langká* (Ceylon) is mostly in Javanese *ngaléngká* (instead of *ing-léngka* (on Ceylon)). In Batak a few remnants of this are to be traced; v.g. *júma* (Dairi, a dry field for cultivation), although it is melted down from *di-úma* (in the field); *kaúma* (Toba) means the same, although it is visibly composed of *ha* (see II.), and *uma* (field for cultivation, either dry or watered), and should signify, to the field.¹

6. In Malagasy *faha* is a prefix, which also forms ordinals from cardinals; v.g. *fahatelo*, the third. In Toba we find *paha* as a prefix for the names of the Batak months; v.g. *si-pahatolu*, the third month (*si* being a prefix for substantives that are used for proper names).

V. The Malagasy has the same idiosyncrasy as its kindred languages:—

1. Tear is expressed by water of the eyes (*ráno-máso*), as in Malay (*áyar máta*), and Sundanese (*chi-míta*), etc.

2. Sun is eye of the day (*máso-ándro*) as in Malay (*mata-hári*) and other languages.

3. To be congealed is expressed by to sleep (*mándry*), as in Batak (*módom*).

4. Prince implies, what is to be waited upon (*andriana*, root *ándry*), just as in Javanese, where *pangéran* (Kawi *pangheran*) is derived from *mangher* (to wait upon).

¹ For other examples see Tobasche Sprakkunst, p. 66a.

5. Backbone is tree of the back (*hazonlamôsina*, i.e. *hazo* + *n* + *lamôsina*),¹ just as in Toba (*hâu-tanggurung*; *hâu*, see III. 1).

6. Vowels are children of writing (*zana-tsôratra*). In Batak the same idea, *anak ni surat* meaning the signs, which are added to the characters, which are mostly consonants, and have the inherent *a* (*ha, ga, ta*, etc.), to express either other vowels (as *i, e, o*, etc.) or the sign of a final *n, h*, etc. In the same way *reni-landy* (mother of silk) is silkworm, as in Malay *indung sutara* is cocoon; *reni tantely* (mother of honey) is bee (in Malay *indung madu* means a honeycomb). In Malay, when bow is opposed to arrow, it is called *ibu panah* (mother of the bow), arrow being expressed by *anak panah* (child of the bow); the same in Malagasy, *renun-antsaky* (mother of the bow, bow), and *zanak' antsaky* (child of the bow, arrow).

7. Leg is expressed by a composition with *coa* (fruit), viz., *coa-ritsa*; as in Batak, calf of the leg (*buah bitis*).

8. Calf of the leg is in Malagasy belly of the leg (*kibon-drango*, i.e. *kibo* belly, *n*, and *rango* leg) just as in Malay (*pârut kaki*).

9. Ten thousand is expressed by *alinn* (night), as in Batak, millions, or any very great number, by *gelap* (dark).

10. *Oh-punjéhy*, name of a kind of worm like a caterpillar, the spanning worm (*ohtra* worm, and *funjéhy*² spanning, from *zéhy* a span, which is the Batak *jongkal jongkal*, what looks like a span, from *jongkal* a span, the insect creeping with a bent back and having the appearance of a spanning hand).

VI. To detect similarity of words in kindred languages the phonetic changes are to be fixed by rules, a mere comparison by homophonous words being dangerous, and often leading the scholar astray; as has happened to Mr. Crawford, who just as Mr. T. Roorda, in his edition of Gericke's Javanese Dictionary, has been deceived by the sound.³ So, for instance, Mr. Crawford compares *colombara* (moustaches) with Malay *bu'ah bawah*,⁴ which has to signify, according to him, hair below,

¹ See § 15

² See § 11

³ See the fourth part of the Bataksch Leeboek, p. 111.

⁴ l. l. p. 156, *buluh* is bamboo, and *bula* hair.

the suffix *ina*: *lelifina* (what is licked or lapped); from which it appears that it is the same word as the Dayak *jelap*.

5. *Di* in the Hova dialect is in the other Malagasy dialects, as in Batak, Malay, etc., *li*; *hadi* (to dig) = *hali* (Toba), *kali* (Menangkabow), *gali* (Malay); *dinta* (leech) — *linta* (Toba and Mandailing), *lintah* (Malay, etc.); *sodina* (fife, flute) — *suling* (Malay), etc.¹

VII. Sanskrit words there are in Malagasy (see VI. 1 and III. 1), but they have undergone the changes of native words, from which we may safely infer that the Malagasy branched off from the languages of the Indian Archipelago after the influence of the civilization of continental India had taken place. The Arabic words have passed into Malagasy directly, v.g. *adimizana* (the tenth month, Arabic *الميزان*),² *talata* (Tuesday) is the Arabic *ثلاثا*, pronounced in Malay and Javanese *salasa*.

VIII. A deeper plunge into the grammar of the language is necessary to convince the reader that the conquering lank-haired tribes came from the west coast of Sumatra after having mixed with a tribe resembling the Nias people, of whose language we know almost nothing, because the Dutch Government takes no interest whatever in scientific linguistic pursuits, leaving it to the Dutch Bible Society to prepare the knowledge of the Malayan languages.

IX. The island of Madagascar may be said to possess one language. Varieties of dialect exist, of course, but are not so numerous that people residing in different parts cannot understand each other, some practice enabling them to sustain a conversation. The principal varieties consist more of a different pronunciation, as will be stated hereafter (§ 17), than of an entire change in the words themselves, or in the structure of the sentences. The Malagasy chiefs like to use in their legislative discussions an ornamental language, consisting of rather high sounding words, that paraphrase the idea, and are easily understood by the context. The Sakalava say, for

¹ Other rules of the transmutation of sound will be found in the course of the grammar.

² In Malay and Javanese adopted without the *t* of the article (see also VI. 5), and a different meaning.

instance, *ny mahalēna* (what is moist) instead of *órana* (rain), *ny mahétsaká* (quencher of thirst) instead of *rúno* (water), *fa-mónty* (lenitive, emollient) instead of *sólíka* (Hova: *sólíkya*) oil, etc. Such periphrastic words are also used to speak without offence, or out of delicacy; so the Sakalava say instead of *amboa* (dog), *fandróaká* (the driver away), because this animal is considered dirty with them as with the Batak (even those that are not converted to Islām), who call a dog in conversation *pangáyak* (pursuer) or a shame giver (*pananggái*),¹ because the words for dog (*ásu*, *biyang*, and *ánjing*) are frequently used as terms of abuse. Instead of *vehivódy* (woman) the Sakalava commonly use *ampisáfy*, who possesses a *sáfy* (which signifies: the hole wherein a hammer is hafted or helved, and figuratively, the *pudendum muliebre*); which reminds me of the Batak *bujing*, which in some parts of the country means *pudendum muliebre*, in others a virgin (commonly repeated *bujing-bujing*). The Betsimisaraká say instead of *masa-andro* (sun) *fanjáva-be* (great illuminator, lighter). A word is offensive or otherwise according to the different parts of the country; so, for instance, *ampela* (girl) is almost an abusive term (strumpet) in the north.

I. PHONETIC SYSTEM.

Of the Letters.

§ 1. The alphabet (*abidy*), introduced by missionaries, consists of twenty letters, and is recited *a, ba, da, e, fa, ga, ha, i, ja, ka, la, ma, na, o, pa, ra, sa, ta, va, y, za*.

a. According to French authorities,² the Malagasy was written formerly with Arabic letters, the power of which however was changed, the Malagasy *z*, for instance, being represented by the Arabic *ya* (Intr. p. 422 below). It would be very useful to consult Malagasy compositions in the Arabic character,³

¹ In the Batak Dictionary this word is by mistake put under *tangga* I. and should be put under II.: to give shame in Batak is the term for scolding, abuse (see *iko* in the Batak Dictionary).

² See Flacourt, *Histoire de la grande île Madagascar*, p. 195.

³ Flacourt, l. l. p. 188, gives a list of thirteen astrological books, of which the titles are evidently Arabic; and p. 177 he gives the title of an Arabic-Malagasy Dictionary, and twenty-seven titles of books on medicine.

in order to correct some blunders that have evidently been committed by the European ear.

Observation.—Instead of *abidy* the alphabet should have been called *abada*, but the English missionaries forgot that they had given most of the vowels the power they have in French.

The Vowels.

§ 2. The *a* is sounded as in French. The *e* is the French *e fermé* (as *a* in slate). The *o* is sounded as *ou* in French, or *oo* in book, whereas the French *o ouvert*, as in *apôtre* (nearly as *aw* in law) is written *ô*. The *i* is sounded as in French, and when occurring as the final of a word is written *y*.

The Diphthongs.

§ 3. The only diphthongs are *ai* (as final written *ay*, § 2), which is also written *ei* (as final *ey*), and *ao*. The *ai* or *ei* is sounded as *ey* in they, and the *ao* as *ow* in row.

a. The *ai* is often contracted into *e*, principally when losing the accent by the influence of a suffix; v.g. *kekérind* (*kaskitrâ* + suffix *inâ*), *béngy* = *baingy*, *déko* = *baiko* (Hova, *baikio*). In an accented syllable it sometimes loses either its first (*a*) or its last element (*i*), v.g. *boraiiky* = *boriky*, *bingio* = *baingio*, *sáiky* = *saiky*. If it is repeated, the first one is reduced into a mere vowel; v.g. *irai-iray* (some) from *iray* (one) is sounded *iréray*, whereas *iray-ray* signifies of the same father, from *iray* and *ray* (father). The pronouns *tsay* and *tzuo* are commonly sounded *izé* (*e* as the French *e ouvert* or nearly as *ea* in head), and *izô* (§ 2).

b. The vowel belonging to a prefix or suffix should never be pronounced as a diphthong with the following or preceding vowel of a word; *matso* is *ma-ttso* (*ma* prefix), *maôzatrâ* is *ma-ôzatrâ*, *fahdinâ* (*fika* + suffix *inâ*), etc.

Observation.—Johns' Malagasy English Dictionary, Griffith's Grammar, and that of the French Jesuits¹ speak of a great many diphthongs evidently by mistake.² Griffith calls *ai* in *maina*

¹ He Bourbon, 1856

² As, for instance, *ia* and *ôa*, which are syllables commencing with consonantal *y* (*ya* and *yo*, see § 16)

and *taitra* a diphthong, but the French Jesuits accent *maina* (§ 5 *a*) and *táitrá*. It is evident that the French grammarians mean by diphthong two vowels following each other, and forming two separate syllables, as may be seen from the following passage in their grammar (p. 15): "If the accent of the root is on a diphthong, as *táo*, *váo*, *hóatra*, *záitrá*, *sáotrá*, it passes then (when a suffix is added) from the first vowel to the second without leaving the syllable; v.g. *zatrína* for *záitrá* and *iná*" (§ 10, II). I think both the French and English grammarians have fallen into the mistake of the Dutch in their Malay grammars, where two consecutive vowels (in separate syllables) are stated to form a diphthong.¹ The two diphthongs mentioned above are peculiar to the Hova dialect, the provincial having instead of them *é* and *ó*. Perhaps these diphthongs have originated in a former orthography according to the Arabic system, wherein *e* and *o* are represented by an *a* followed by a final *y* and *w* (compare *Observation*, § 4).

The Consonants.

§ 4. The *j* is sounded as *dz* in *adzo*. The *g* is always hard (as in *give*), and the *h* aspirated (as in *hunt*). The *v* is sounded as *w* in Dutch and German.

a. The Hova dialect, which has become the literary language, has but two nasals, viz., the dental (*n*) and the labial (*m*), while the guttural nasal (*ng*, as in *singer*) is not represented by a separate character, and only occurs there as a final before the guttural consonants *k* and *g*. The combination *ng* should therefore be sounded as *ng* in longer. In the provincial dialects, however, the guttural nasal (the *ŋ* of the Malay) is used also as a medial, and is represented by the French Jesuits by *n* with the grave accent;² v.g. *anárán* (name = Kawi and Sunda *ngáran*). The Dutch, in their transliteration of the Malayan words, represent it by *ng*, whereas *ng*, as in longer, is written by them *ngg*. Even the French weak guttural nasal

¹ See, for instance, the third edition of de Hollander's *Handleiding bij de beoefening der Maleische Taal en Letterkunde*, p. 31, where *dáun* is stated to be a monosyllable. The pronunciation *dáun* belongs to the lingo of European Malay.

² For want of the proper type, we express this guttural nasal by *n*.

sound, as in son, sein, is unutterable to the Hova: *du vin* has become *divay* (wine), *gant* is *ga* (glove), etc. The word for soap (*savony*) is not taken from the French, but is Arabic (صابون). The *ñ* gives the advantage of distinguishing words that are homophonous in the Hova; v.g. *óraña* (crayfish) = *urang* (Javanese), but *óraná* (rain) = *údan* (Javanese and Butak).

ð. In the provincial dialects too there is a palatal nasal (the *ñ* of the French Jesuits) to be sounded as *gn* in French (*règne*) or nearly as *ni* in onion. It is the *ع* of the Malay.

Observation.—That the literary language does not express these two nasals is perhaps owing to the Arabic character,¹ which has no separate letters for *ñ* and *ñ*, nasals which are unutterable to the Arabs as initials, medials, or finals of a word (the proper name *Palémbang*, on the east coast of Sumatra, is sounded by the Arabs *salimban*).

Of Dumb Sounds.

§ 5. The vowel of the final syllables *ka* (sometimes *kia*, § 16), *tra* and *na* is but very slightly sounded, or, according to the dialects, left out altogether; v.g. *rácina* (leaf = Malay *dáun*, Kawi *ron* instead of *ráun*), *ólitrá* (worm = Malay *ulat*, Javanese *úler*), *kóhaka* (cough, compare Butak *hóhak*, expectorated spittle). These syllables will henceforth be called dumb syllables.

a. If the dumb syllables follow immediately the accented syllable, their vowel is sounded as an echo of that of the preceding syllable; v.g. *ritrá* is nearly *ritri*, *maina* is almost *maini*.

b. Every final syllable, if immediately following the accented one, has an almost imperceptible sound, which may be changed into any other vowel (compare § 12, 14 a), and very often is but an echo of that of the preceding syllable; v.g. *tóro* (provincial, as in Javanese) = *tóry* (*ma-tory*, to sleep), *vilány* (cooking vessel) is almost *viláña* (= Malay *balínga*).

c. The *a* of *ka* is often clearly sounded when followed by the syllable *ka* of a following word; v.g. *manápaka házo*.

d. The *y* is nearly dumb—

¹ Compare Observation, § 3.

1. in the pronoun *ny* (of him, of her, its) ; v.g. *ny áda-ny* (his father) is sounded nearly *ny ádan* ;

2. in the final syllable *ny*, when taking the place of *na* (§ 8) ; v.g. *ny ráviny ny házo* (the leaf of the tree) is sounded nearly as *ny rávin ny házo*.

The Accent.

§ 6. The accent is on the penultimate, save when the word having more than two syllables, although not derived, terminates with a dumb syllable (§ 5), in which case it is always on the ante-penultimate ; v.g. *vilány* (§ 5b), *faláfa* (the mid rib of the banana leaf ; compare Malay *palápak*), *kólatrá* (mushroom, Malay *kúlat*), *rávina* (§ 5), *lálana* (road, path, Javanese and Batak *dálan*), *lalána* (law), *tánana* (hand, Hova *tanana*, § 4a ; Malay *tangan*), *tanána* (village), *kóhaká* (§ 5). The vowel of the syllable immediately following the accented one must never be sounded so as to become an *é* (as in English *bettér*, Dutch *betér*), and § 5b must be attended to. The accent is not influenced by a prefix ; v.g. *habé* (prefix *ha*, root *be*).

§ 7. The accent passes on to a following syllable by the influence of a suffix ; v.g. *vonóina* (*vóno* + *iná*), *fakáina* (*fáka* + *iná*), etc. The monosyllabic roots, and those that have the accent immediately before the dumb syllables, are excepted ; v.g. *lávina* (*la*, inserted *v*, and *iná*), *béziná* (*be*, inserted *z*, and *iná*), *ankaftizina* (what is tasted), from *mankafý* from *fy* (§ 6).

a. In compound words the last word has always the accent ; v.g. *tokový* (iron trivet), from *tóko* (trivet) and *vy* (iron) ; *salazambý* (gridiron) from *salázana* (see p. 5, above) and *vy*.

Change of Vowels.

§ 8. The dumb *a* (§ 5) is assimilated to the vowel of the preposition *ny* (of) following ; v.g. *ny ráviny ny házo* (§ 5d), instead of *ny rávina ny*, etc., *sóratry ny óloná* (writing of men), instead of *sóratrá ny*, etc., *mpamápaky ny óloná* (ruler of men), instead of *mpamápaka ny*, etc.

§ 9. An *i* is changed into *e* by the influence of a suffix—

1st, Mostly, when the preceding syllable has another vowel than *i* ; v.g. *kekérina* (*kékitrá* + *iná*, § 10, II.), *olérina* (*ólitrá*

+ *ina*, § 10, II.), *matësa* (*maty*, inserted *s* and suffix *a*), *atrehina* (*atrika* + *ina*, § 10, I), etc.

2nd. When it occurs in the first syllable of a bisyllabic word terminating with the dumb syllable *trá*; v.g. *retinã* (*ritra* + *ina*, § 10, II).

a. Often a final *i* (§ 2) is changed into *a* before an inserted *z* (§ 14), when the suffix *anã* is added; v.g. *salizana* (*sály* + *anã*), *topuzana* (*tópy* + *anã*), *tambázana* (*támby* + *anã*), *dimbázana* (*dimby* + *anã*), *fafázana* (*fáfy* + *anã*); comp. p. 5, above.

b. The final *z* of bisyllabic words sometimes coalesces with the initial vowel of the suffix *ina*, and receives the accent without becoming long; v.g. *ahina* (*ahy* + *ina*), *irina* (*iry* + *ina*), *tahina* (*táhy* + *ina*). It becomes accented *e* with the initial vowel of the suffix, if the first syllable of the word has no *a* or *i*; v.g. *jeréna* (*jéry*), *teréna* (*téry*), *ronjina* (*rónjy*), *ekéna* (*éky*), *voléna* (*róly*), *reséna* (*résy*), etc. In the same way the final *a* of a bisyllabic root coalesces with the suffix *a*; v.g. *mombá* (*mómbo* + *a*), *migadrá* (prefix *mi* + *gádra* + *a*).

c. The *a* resembles often the French *c ouvert* in the suffix *anã*, when it is preceded by an accented *i*; v.g. *fihiana* and *famaktiana* are sounded nearly as *fihuèna* and *famukièna*.

d. Before a syllable, which has the accent by the influence of a suffix, an *e* or *o* of the root may be sounded as *e* (§ 6); v.g. *rêréto* (*réretre* + *o*, § 10, II.), *érôana* (*oro* + *anã*).

e. In the Provincial dialects the *o* of a last syllable is often changed into *ô* (§ 2) in receiving the accent before the suffix *anã* or *a*; v.g. *fanaôrana* (*fanáo* + *anã*), *famorôvana* (*famôrona* + *anã*), *relôma* (*relona* + *a*), etc.

Change of Consonants.

§ 10. The dumb syllables (§ 3) undergo before suffixes the following changes:

I. *Ka* becomes commonly *h*; v.g. *iráhina* (*iraká* + *ina*), *robáhina* (*robaká* + *ina*), etc.

a. Rarely it becomes *t* (*robátina* ~ *robáhina*).

b. When it becomes *f*, the only cause of this must be a former form of the word, such as may be inferred from the corresponding word in a cognate language (see *h lafinã*, Intr. p. 9).

Another example is *atréfinā*, next to *atréhina*, what is fronted, or faced, from *átrikā* (Hova: *átrikā*, § 16) and the suffix *inā*, from which a former form *átrif* (§ 19, *b*) = Javanese *adép*, Batak *ádop*, Malay *hádap*, etc., may be supposed to have existed. In *hirifinā* = *hirihina* (what is bored), and *hirifanā* = *hirihana*, from *hrikā* (Hova, *hrikia*, § 16), the similarity of the aspiration with the spirancy of the *f* may be the reason, as the corresponding Malay word is *girik*.

Observation. The final syllable *ip* of the Malay is pronounced *iq*¹ in the Menangkabow; v.g. *kātiq* = *katib* (Arabic *خطيب*).

II. *Tra* becomes *r*, if the word does not contain in another syllable an *r*, in which case it becomes *t*; v.g. *hoárinā* (*hóatrá*), *zairinā* (*záitrá*), *olérinā* (*ólitrá*), *kekérinā* (*kékitrá*), etc., but *rétina* (§ 9, 2), *sortinā* (*sóritrá*), *sorátanā* (*sóratrá*), *roritinā* (*róritrá*), *rifátinā* (*rifatrá*), *rombótanā* (*rómbotrá*), etc.

a. Rarely it becomes *f*; v.g. *saófanā* (§ 9, *e*) next to *saóranā* (*adótrā*). In *sokáfanā* (what is opened), from *sókatrá*, a former *sókaf* may be supposed to have existed from the corresponding Toba *ukkap*, Menangkabow *singkap* (Intr. p. 4, 2). Another example is *tsentséfinā* (what is sucked), from *tséntsitrā* (compare Malay *sásap*, Batak *sósop* or *sēsēp*).

III. *Na* becomes *n*, and where it becomes *m*, a cognate language must be resorted to; so, for instance, *velóma* (§ 9, *e*), from *vélonā*, and suffix *a* is explicable by the Dayak *belom* (to live), and *indrāminā* (what is borrowed, from *indranā*), by the Batak *injam*. Another example is *ampinóminā* (what is caused to be drunk) from *minonā* (to drink) = Malay *minum*.

a. *Tenóminā* (what is woven, from *ténonā*) and *taóminā* (what is gathered, from *táonā*) do not seem to be explainable by the corresponding words of the cognate languages (Malay *tānun*, Batak *tonun* or *tēnun*; Malay *tahun* year, Daíri harvest time), but remind us of the constant interchanges of *in* and *un* with *im* and *um* as final syllables (§ 19, *b*) in Batak and Menangkabow.² From this is also to be explained *aréminā* (what is rectified), from *árinā*.

¹ By *q* is meant a final *k* swallowed up, being a kind of click.

² See Tobasche *Sprachkunst*, p. 63 *c*.

§ 11. In compound words the dumb syllables *tra* and *ka* of the first are left out, in the meantime either changing the initial consonant of the second, or requiring an inserted consonant. The change affects *h*, *f*, *r*, and *l*, which become respectively *k*, *p*, *b*, and *d*; *tapakázo* (*tápuka* + *házo*), *misi-páry* (*misika* and *fúry*), *mañombobolo* (*manombotrà* + *rolo*), *mitaridákana* (*mitúrika* + *lákana*). The inserted consonants required are *d* before *r* and *z*, and *t* before *s*; v.g. *efajáto* (§ 4) (*éfatrà* + *zato*), *manjandrúry* (*manjätürà* + *ráry*), *manondro-tsikina* (*manondrotrà* + *sikinà*).

a. If the second word commences with a vowel only the final *a* is left out; v.g. *eritréritrà* (*éritrà* repeated), *lacakóronà* (*lécakà* + *oroñà*).

b. If a word commencing with *h* and terminating with *trà* or *kà* is repeated the final *a* and initial *h* are left out; v.g. *horotrórótrà* (*hócrotrà* repeated), *hotikotikà* (*hótika* repeated), *horakórákà* (*hóraka* repeated).

§ 12. The dumb syllable *na* occasions the same changes (§ 11) in composition,¹ losing however only its vowel, the remaining *n* following the class of the initial consonant (becoming *m* before labials, and *ñ* before gutturals); v.g. *mihinampáry* (*mihinanà* + *fúry*), *manambòla* (*mínaná* + *róla*), *manarankélókà* (*mañ-áranà* + *héloka*), *manatondapa* (*manátonà* + *lapa*), *minondráno* (*minona* + *ráno*), *manantsáinà* (*mánaná* + *sáinà*), *manakonjávatra* (*manákonà* + *zátatrà*).

a. On the east coast initial *h* in this case is often changed into *tr*; v.g. *olontráfà* = *olonkáfà* (Hova) from *ólona* and *háfa* (compare *b*).

b. When a word commencing with *h* and terminating with *nà* is repeated, *nh* sometimes becomes *ng* (§ 4 a), and sometimes *tr* (compare a); v.g. *hozongozonà* (*hózonà* repeated), *horongóronà* (*hóronà* repeated), *hilontrólona* (*hilonà* repeated), *helontrélona* (*hélona* repeated). This dissimilarity is owing to the final, where it blends with initial *h* into *ng*, being properly a guttural nasal (*ñ*), which requires a consonant of

¹ According to rules, which will be specified below, the pronominal suffixes differ, when taking place after the dumb syllable

its own class, and where it passes with initial *h* into *ntr*, being a real dental (*n*), which requires in the same way a consonant of its own class. In Toba *nh* changes into double *t*, and *ngh* (*nh*) into double *k*; v.g. *daláttu* (*dálan* + *hu*), *biákkhu* (*biang* + *hu*).

§ 13. If the second word commences with *m*, all the dumb syllables are left out; v.g. *olomásina* (*ólóná* + *másina*), *mami-máso* (*mamítrá* + *máso*), *loramáso* (*tóráká* + *máso*).

Observation.—The *n* being left out here is against the rule (§ 12), but perhaps the natives sound a double *m* instead of *nm*, as in the Toba, where, for instance, *napurámmu* is the pronunciation of *napuran* + *mu*.

Inserted Consonants.

§ 14. Before the suffixes *a* v (§ 4) is often inserted after final *o* or *a*, and *s* or *z* after final *e* or *i* (*y*); v.g. *lávina* (*la* + *ina*), *antsóviná* (*ántso* + *iná*), *noftsiná* (*nófy* + *iná*), *bézina* (*be* + *iná*), *relézina* (§ 9, *rély* + *iná*), etc.

a. When one of the syllables of the word commences with a labial (*f*, *p*, or *v*) an *s* or *z* are also inserted after final *o*, to avoid the succession of syllables with similar sounds; v.g. *nofósaná* (*nófo* + *aná*), *toróziná* (*tóvo* + *iná*), *fíralózaná* (from *valo*, *miválo*).

Observation.—The inserted consonant is sometimes to be explained from the final of the corresponding word in a cognate language (Intr. p. 422, Obs.). Other examples are *ampalésiná* from *ampály* (a tree, the coriaceous leaves of which are used for smoothing earthenware, compare Malay *ampálas*), *fiázaná* (what is squeezed), from *fía* (Javanese *pérès*), *kihísaná* (what is scraped) from *hihy* (Malay *kíkis*, § 17, 3), *hehéziná* (what is scratched) from *héhy* (Malay *kakas*), *heréziná* (what is fortified) from *héry* (Malay *káras*), etc. Sometimes the inserted *z* is a *y* in the corresponding word of a cognate language, as the Malagasy has no consonantal *y* as medial (compare § 1 *a* and Intr. p. 422, below); v.g. *salázaná* (Intr. p. 423), *tetézaná* (bridge) — *titiyan* (Malay) from *téty* (Malay *titi*, Menangkabow *títih* and *títis*).

§ 15. Between two substantives, of which the second quali-

fies the first, a nasal is inserted, which corresponds in class with the initial consonant, and occasions the above (§ 11) stated changes; v.g. *akondronjûza* (*akônîro* and *zûza*), *dintambûrunâ* (*dinta* + *raruîna*), *voankêna* (*voa* + *hena*), *roandrami-âry* (*vôa* + *ramiâry*), *traîonkala* (spider's web, *traîno*, house, and *hâla*, spider), etc. Sometimes the nasal is not sounded, although the initial has suffered the change; v.g. *vato-karânânâ* next to *vatoharânânâ* (*vato* + *harânânâ*), *atidoha* (braine), from *âty* (liver, inside), and *lôha* (head). From the materials at my disposal I as yet can give no rules by which to know either when the nasal must be inserted or not, and when it is to be sounded and when not. So, for instance, *oriâla* (wild yam,, from *ôri* (yam), and *âla* (forest) without an inserted nasal, but *dintanâla* (forest leech), from *dinta* (leech) and *âla*, and *orimbazaha* (European yam, potatoes). Again we find *voatarombazaha* (*voatâro*,¹ pumpkin, *cazaha*, European), notwithstanding *voatarohora* (native or Hova pumpkin), instead of which one would expect *voatarohôra*.

a. To account for this irregularity I think that some of these compositions (*ori-âla*) are only made by juxtaposition, and others by means of the preposition *ny* (as in Batak *ni*, of). In the Toba the vowel of *ni* is left out before initial *j* (nearly as *j* in judge), *t*, *d*, *l*, *r*, and *s* (v.g. *oppunjômba* instead of *ôppu ni jômba*). In the Duîri we have *n* sometimes inserted between the vowels of two words in composition; v.g. *arinônan* (market day) — *arinônan* (Toba *âri*, day, and *naun*, market, held in the field). As to an initial *h* being changed into *k*, although the nasal is not sounded, as in *vato-karânânâ*, it is just according to the Toba pronunciation (§ 12, b). Another example of this peculiar pronunciation we shall find below (pronominal suffixes).

¹ *Taro* is the name (root meaning fru t). This *taro* (Batak *idbu*, § 17, 6) is in Malay *tabu* (with the first syllable dropped, the Sanskrit *atibhu*). This word is an interesting proof that the Sanskrit word came into Malay from the Indian Archipelago. In the Malay in *t* and *n* interchange very often (Lobasche Sprakkunst, p. 61, 19) so that a former *n* can be probat. Now the nasal has, as a verbal sense are often changed into the shug ~~state~~ then, as *differa tenus*, whenever the word is current as substantive (see Jaco Koorda's beentfening van 't Javaansch bekenen, p. 8, annotation), and so we get *tabu* (see Addenda, p. 28).

§ 16. The Hova likes to insert a *y* (written *i*) after the gutturals (*k*, *g*, *nk*, *ng* and *h*), when the preceding syllable has an *i*; v.g. *horidi-kio* (pronounced *horidi-kyo*), what I have to buy, instead of *hovidy + ko* (pronominal suffix, of me, mine), *láfikia* (pronounce *láfikya*) = *láfika* (provincial, Batak *lápik*), *bíngio* (*bíngyo*) = *bíngo* (provincial), *mikiása* (*mikyása*) = *mikása* (provincial, *mi* prefix and *lása*), etc. This is a rule whenever the gutturals have *a*, and almost so if they have an *o*. The inserted *y*, however, is commonly left out in derivatives; v.g. *kikóind*, from *kíhio* (*kího*, elbow, corner).

a. In the provincial dialects a *y* is often inserted before the suffix *enâ*, before the suffix *anâ*, (see § 9, *b*); v.g. *vonjyéñâ* (written *vonjiéñâ*). In the same way a *w* is inserted before the suffix *anâ*, when the preceding syllable has *o*: v.g. *fombwána* (written *fom boána*) instead of *fombána* (*fomba + ana*, see § 9 *b*).

b. The French Jesuits speak of an *i* added before bisyllabic words commencing with *o*, when they are augmented by a suffix, and also of an *o* before monosyllables in the same case; v.g. *íorânâ*, instead of *óvanâ* (from *ova*), *íorind* instead of *óring* (from *ótra*, see § 10, II), *oxóind*¹ instead of *zóisâ* from *zo*.

Dialectical Peculiarities.

§ 17. According to the several dialects the following sounds are in some words identical:—

1. *Ti* (Sakalava) = *tsi* (Hova and East coast); v.g. *ráty* = *rátsy* (bad), *fóty* = *fótsy* (white, Malay *púti*, Nias *fúchi*); compare *tsinjo* (*mi-tsinjo*, to gaze) with Malay *tinjow*, Batak *tindo*, *tsindri* (*voa-tcindri*, pressed) with Malay *tindih*. The Daíri and Malay has often *chi*, where Toba has *ti*²; v.g. *kòching* (Malay *kúching*) - *húting* (Toba, see 3), a cat.

2. *Li* (Sakalava and Betsimisáraka) = *di* (Hova and East coast); v.g. *linta* (also Batak, Malay *lúntah*) = *dinta* (leech),

¹ Johns's Dictionary has *ozoing* without an accent (see under *manjo* from *zo*). This work has neglected the accent to such an extent that it is sometimes impossible to see the derivation of a word, so for instance, it has *ombé*, whereas the grammar of the French Jesuits has *ombé* (chief, magnate), from which it appears that it is to be derived from *be* (great).

² See Tobasche *Spraakunst*, p. 35, D. III.

lily = *didy*, etc. Compare *sódina* (fife, flute) = *súling* (Malay), *tadiny* (§ 5, *b*, foramen of the ear) = *tulingu* (Malay, ear), *hodidina* = *kuliling* (Malay), *hadi* (*mi-hadi*, to dig) = *hadi* (Toba), *káli* (Daíri, and Menangkabow), *gáli* (Malay), etc.

3. *K* = *h*; v.g. *kély* (small) = *hély*, *kálaña* = *hálaña* (compare Toba *hálung*, Menangkabow *kalang*, etc.) etc. The Daíri has regularly *k* as medial and initial, where Toba has *h*, and even the character representing *h* in Toba is sounded *k* in Daíri.

4. *R* = *l*; v.g. *roso* = *loso* (departed), *láha* (Sakalava) = *ráha*. This change is not frequent in the Batak, and commonly takes place by phonetic attraction, by which an *l* or *r* of a preceding word is mostly changed into *r* or *l*, whenever the following has *r* or *l*; v.g. *marampis bibirna* (thin are his lips), instead of *malampis bibirna*, *silumimpang dalan* (a road branching off finger like, i.e. with many sideways), instead of *sirumimpang dalan*. As I have not been so happy as to consult many Malagasy works written by natives, I am unable to decide whether this change is to be accounted for in the same way.

5. *P* = *f*; v.g. *fúoká* = *púoka*, *fótraka* = *pótraká*. The Nius cannot sound *p*, and the Batak not *f*.

6. *B* or *mb* = *r*; v.g. *ambily* (Sakalava) = *aridy* (see 2, Hova and East coast), *ábo* or *ámbo* (Sakalava) = *aro* (Hova and East coast), *ambéla* = *arela*, *behabéla* = *cehacéla*. The Javanese has regularly *w* as Malagasy, where Malay and Batak have *b* (*úuri* = *uri* = *úbi* Malay and Batak).

7. *J* (§ 4) = *z*; v.g. *jámba* = *zámba*, *jéhy* = *zéhy*. The *z* in Malagasy is often *j* in Malay (*zóro* = *júru*, corner). In the Bugis *j* often represents *y* of the Malay and *z* of the Malagasy; v.g. *áju* (tree, wood, instead of *háju*) = *layu* (Malay and Daíri, etc.), *házo* (Malagasy), *háyu* (Mandailing and Sub-Toba).

8. *S* = *ts*; v.g. *pótsaká* = *pósaka*. The *ch* of Malay and Daíri is pronounced *s* in Toba if not provided with an *i* (*bácha*, Sanskrit *wāchá*, = *bása*).

9. The Hova has often *ai* or *ei* (§ 3) where the provincial dialects have *e*.

¹ See 1.

10. Instead of the dumb syllable *trā* of the Hova, the Western dialects have regularly *tsā*, and the Eastern and Southern *chā* (*ch* nearly as in English *child*); v.g. *ēfatsā* = *ēfatrā* (four, Batak *opat* or *empat*). Flacourt¹ has *tūmits* = *tōmotrā*² (heel, Malay *tūmit*).

11. Several words have indifferently either of the dumb syllables. The dumb syllable *trā*, when the preceding syllable has an *i*, is often *kā* (*kia*, § 16); v.g. *ma-fāitrā* (bitter) = *ma-fāikā*, *pōtsitrā* = *pōtsikā* (*pōtsikia* in Hova, § 16), smashed. The Menangkabow pronounces the final syllable *it* of the Malay as *iq*; v.g. *paig* (bitter) = *pāit* (ناجيت). Strange is it, that some words have a final *nā* = *kā*; v.g. *fāsina* (sand) — *fāsikā* (or *fāsikia*), *maina* = *maika* (dried out). In Malagasy a final *nā* represents sometimes an *r* of the Malay; v.g. *fāsina* = *pāsir*, *lamōsina* (back) = *lamūsir* (the flesh of an animal's back which extends along each side of the spinal bone); *kāmbana* (twins) = *kāmbār* (Malay).

a. Sometimes this change of *nā* and *kā* is only explicable by supposing *nā* to be properly *nā* (§ 4 a); so, for instance, we have *ōronā* (nose), Javanese *irung*, Dayak *urong*, Hova *ōronā*, and *ōrokā* (*mañorokā*), to smell, to kiss in the native way by smelling or touching noses; compare the two significations of the Malay *chitum*,³ etc. Both words are originally the same, as is proved by the rule of Batak, where the Dairi dialect has as final *nā* when the Toba has *kā*; v.g. *kōning* (the curcuma root conspicuous for its yellowness) = *hūnik*⁴ (Toba), *kūning* (Malay, yellow).

12. In the Hova and in the South-east coast the *s* is nearly palatal, and sounded as *ch* in French (or *sh* in English) principally by the influence of a preceding or following *i* (*missy* is nearly *mishī*).

13. In the North an *i* is sounded as *e* when the preceding accented syllable has *a*, and sometimes also when it has an *e* or *o*; v.g. *fāte* = *fāty* (corpee), *fēre* = *fēry* (wound), *tāne* =

¹ Flacourt's vocabulary I have not been able to consult, the alleged word having been taken from Von Humboldt's great work on the Kawi.

² The Dictionnaire Français-Malgache (Ile Bourbon, 1856) has *tōmitrā* as the provincial word (see under *talon*).

³ See Opmerkingen naar aanleiding van eene taalkundige verhandeling van den Hoogleraar Roorda, p. 48.

⁴ See Batak Dictionary and Tobasche Sprakkunst, p. 65, vi.

tány (earth), *áhetrá* — *áhitra* (grass). The Batak has very often *e* in the last syllable where a cognate language has *i*, when one of the preceding syllables has *a*; v.g. *páte* = *páti* (Javanese), *baúme* (earth) = *búmi* (Malay, Sanskrit *bhūmi*). As *e* and *o* as finals are often interchanged in Batak (*págo* = *páge*, rice in the husk), so we see the Batak *táno* to be = the Malagasy *tany*.

14. Some words commence either with a vowel or an *h*; v.g. *ózatrá* — *hozatrá* (muscle).

a. The French Jesuits mention as faulty the pronunciation of *ándra* instead of *ándro* (day), *imba* instead of *imbo*, *éna* instead of *éno*. The word *ándra*, however, is explicable from § 5 b, whereas the others may be accounted for if we consider that an accented syllable easily obscures the vowel of a following or preceding syllable (§ 9 d) to such an extent that it becomes colourless, and thus interchangeable with any other vowel. In the same way we have to explain *fóntra* instead of *fónitra*, *fanóntra* instead of *fanónitra* (wasp, compare Menangkabow *pañangit*, Batak *piyóngot*). The expression *ridi-ko* (or *vidi-ko*) is sometimes sounded *ridi-ky*. A current abbreviation is *háy-ky* instead of *háy-ko izy* (I know it). Use has consecrated also the abbreviation of *ataóco* (*atáo* + *o*, § 14) into *atáro*, of *ataócy* (*atáo* + *y*) into *atáry*, and of *anaócraná* into *anáraná*.

Transposition of Sounds.

§ 18. Transposition of sounds often takes place in words containing either hissing (*z*, *j*, *s*, *ts*) or vibrating sounds (*l* or *r*); v.g. *makáty* = *maláky* (quick), *azahóaná* — *ahazóaná* (*ázo*), *andrahóaná* = *ahandróaná* (*hándro*), *sakariro* *sakarivo* (ginger), *zouriná* — *ozaríná* (*ózatrá* + *iná*), *akítsa* — *atsíkia* (*atsíkia*, Hova).

a. In this way *rézatrá* (belching) is evidently the Batak *tráp* (see p. 443).

b. The language of the woods (*volan'tanála*) makes a rule of it, according to the French Jesuits.

Form of Primitive Words.

§ 19. Primitive words are mostly bisyllabic (or trisyllabic with

a dumb syllable, see below, *b*). They are seldom monosyllabic (*be*, *lo*), and when they have more than three syllables they are either foreign words, or have the appearance of being derived either by repetition or composition. Even these words are often found to have lost one of the first syllables; v.g. *ralávo* (provincial, see Introd. I.) = *roalávo* (having the appearance of being a composition of *vóo* and *lávo*) a rat, *batéra* (tobacco box) = *tabatéra* (French *tabatière*), *laláo* = *laoláo*, *kattso* = *kamattso*, *lamósina* = *lakamósina*.

a. The vowel of one of the first syllables of polysyllabic words is often uncertain (§ 17, 14 *a*) even in derived words when the accent is on a following syllable; v.g. *tetézaná* = *tatézaná* (bridge consisting of a narrow board, from *téty*), *laférand* = *leféraná* (the hock, from *léfitra*, accordingly what is folded, where a fold is), *kobóbo* = *kibóbo*, *kofúfa* = *kifúfa* (broom, from *fafa*, *mamáfa*, to sweep, etc.), *fanjózoro* next to *sonjózoro* (pith of bulrushes, from *fo*, pith and *zózoro*). Hence perhaps also *angádi* = *fangádi* (from *hádi*).

b. Trisyllabic words terminating with a dumb syllable must be considered bisyllabic, as is evident from the form they take before suffixes (*olérina*, worm-eaten, for instance is at first sight *óler* + *iná*, although derived from *ólitra*, worm, and *iná*).

NOTE ON THE RELATION OF THE KAWI TO THE JAVANESE.

The relation of the Kawi to the Javanese, as of a mother to her daughter, has been contested of late by Professor Taco Roorda, who is of opinion that the Kawi is not the ancient Javanese, but on the contrary a different, although cognate, language, which existed formerly somewhere in Java as an independent language, in the same way as does now the Sunda.¹ I beg leave to call the reader's attention to the great improbability of this opinion, since eminent men, as Sir Stamford Raffles, although not having at their command the materials which have now-a-days become accessible to the Dutch, have long ago asserted the contrary. I repeat here, with a few additions, what I have elsewhere² said, to combat Roorda's opinion. It was Sir Stamford Raffles who, the first of all, took an interest in

¹ Bijdragen tot de Taal-Land-en Volkenkunde van Nederlandsch Indie (nieuwe volgrecks, vol. viii) p. 88.

² Taco Roorda's Beoefening van 't Javansch bekeken, and Opmerkingen naar aanleiding van eene taalkundige bijdrage van den Hooggeleeraar T. Roorda.

the language and literature of Java, and gave in his celebrated work specimens of the Kawi text of the *Bratayūda* (*Bhāratayuddha*), which, considering the time of its publication, when Javanese was not yet studied, may claim our admiration.

As the grammar of the Kawi, and a great many words in the Kawi poems, are not yet sufficiently known, I am compelled to confine myself to its phonetic system in order to show its relation to the Javanese as to its degenerated offspring. The Kawi resembles in this respect the Javanese to such an extent that a great many Kawi words may be identified with Javanese only by resorting to a few phonetic laws, whereas some have only undergone a small alteration.

I. When the Malay and Batak equivalent word has *r*, and the Tagal or Bisaya has *g* (hard as in *give*), both the Kawi and Javanese have no consonant. Examples:—

1. To sleep, is in Javanese *tūru*, in Kawi *turā*, in Malay *tidur*, in Bisaya *tulug* (see II)

2. The Javanese *dus* (root of *ādus*, to bathe, as intransitive, and *ngədus*, to bathe, as transitive) is in Kawi *dyus* (*madjus* = *adus*, *mangdyus* = *ngədus*), in Malay and Batak *dirus* (*mandirus*, to sprinkle), in Bisaya *digus* (*bañar a otro*).

3. *Rēmur* (Batak), *lindug* (Bisaya), earthquake, is, both in Javanese and Kawi, *lindu*.

4. *Orang* (Malay), *urang* (Menangkabow), is *wang* in Kawi, and *wong*¹ in Javanese.

5. *Urat* (Malay), root, is in Bisaya *ugat*, whereas Javanese has *wad* and Kawi *wiad*.

6. *Pārah* (Malay, root of *māmārah*, to squeeze) is *pōro* or *pēroh* in Batak, *pigd* in Tagal, *pogd* in Bisaya, whereas Javanese has *poh*, and Kawi *picah*.

7. *Terap* or *torap* (root of *terapēn* or *torāpan*, to suffer from belching or eructation) in Batak is *tigāb* in Tagal,² *togāb* in Bisaya, whereas Javanese has *tob* (*atob*, *a* is a prefix), and Kawi *twab* (*matwab*, to belch; *ma* is a prefix).

8. *Dāngar* (Malay to hear, *mandāngar*) is in Bisaya *dungug*, in Javanese *rungu*, and in Kawi *rīngē* (see II).

II. When the Malay and Balinese *d* of equivalent words is repre-

¹ Of course all the languages have not an equivalent in sound, so for instance, the Batak word for "to sleep" is *modon* or *medem* (compare Kawi *mērem*).

² The *a* in the Javanese in these cases may be explained by the broad pronunciation in English of *water*, whereas in the Scotch and Dutch word the clear French *a* is heard.

³ In the Batak Dictionary, under *torap*, these words are, by mistake, wrongly spelt.

sented by *l* in Bisaya or Tagal,¹ both the Javanese and Kawi have *r*. Examples:

1. *Hidung* (Malay) nose, is in Tagal *ilong*, whereas Javanese has *trung*, and Kawi *hirung*.
2. *Tidur* (Malay) = *turā* (Kawi, see I. 1).
3. *Dangor* (Malay) = *rēngē* (Kawi, see I. 8).
4. *Dāun* (Malay) leaf, is in Balinese *don*, in Javanese and Kawi *ron* (in Malagasy *ravinā*).²

III. When a *j* of Balinese and Malay is *d* in Batak, the Javanese and Kawi both have also *d*. Examples:

1. *Jālan* (Malay and Balinese) road, way = *dālan* (Kawi, Javanese, and Batak).
2. *Jauh* (Malay) far, is in Balinese *joh*, in Kawi and Javanese *doh* (*madoh* and *adoh*), and in Batak *daō* or *ndioh*.
3. *Hujan* (Malay and Bali) rain, is in Javanese and Batak *ūdan*, in Kawi *hudan*.
4. *Dilat* (root of Kawi and Batak *mandilat*, to lick, to lap, Javanese *andilat*) is in Malay *jilat* (*manjilat*), *djelap* (Dayak, see Introduction, VI. 4, Observation).

A. Besides, a great many Javanese words are only to be explained by means of their form in Kawi. Examples:

1. Elder brother, is in Kawi and Dañri *kāka*, but in Javanese *kākung*. The final *ng* is only to be explained from a rule in Kawi, as still now in Batak (partly also in Mangkasar and Javanese),³ that words terminating with a vowel, when followed by a pronominal suffix, require a corresponding nasal; v.g. *wēkangku* (*my* son) from *wēka* (son), and *ku* (pronominal suffix), *my*. Of this rule, which has become almost obliterated in modern Javanese, the *ng* is a remnant, being mistaken for the final of the word.

2. The prefix *ma* (forming the active of verbs) in Kawi, Batak, and other cognate languages, has almost become disused in Javanese, where it has dwindled down into *a*,⁴ and is often left out when the word has, or increases to, more than two syllables; v.g. *maḍyus* — *aḍus* (see I. 2), and *mangḍyus* = *ngēḍus* (instead of *angḍus*, the *ē* being necessary, as the final nasal does not correspond with the class of the initial of the root). Hence foreign words commencing with an *m*, and being no verbs, have often either lost the prefix, or have changed the *m* into *p*; v.g. *nāṭāpa*,⁵ is the Kawi and Sanskrit

¹ Save when initial (see *dungug*, I. 8).

² See Tobasche *Spraakkunst*, § 17, 1V. a.

³ In this language the pronominal suffix *ta* used in poetry requires after vowels a corresponding nasal.

⁴ The prefix *mag* of the Tagal and Bisaya has dwindled down into *ag* in Iloco.

⁵ Also Malay.

manastāpa, *sucur* from the Arabic مشهور, *prakata* from the Sanskrit and Kawi *markata*, *pēsigit* is in use next to *mēsigit* (Arabic مسجيد), *prēdangga* next to *mṛdangga* (as in Kawi from the Sanskrit), *pan-dōpa* next to *mandapa* (Sanskrit and Kawi). In the passive the verb may also take the form of a substantive, by leaving out the initial nasal, and hence we find in the passive *imbar* (active *ngimbar*, to make somebody swear by the pulpit) from the Arabic *mimbar* (منبر) pulpit. The same is the case with *angsa* (in the passive of *ngangsa*, to devour) from *māngsa*¹ (Sanskrit, flesh, meat), next to which we find *māngsa* as verb (to devour, said of monsters and animals of prey). In the Batak, the Sanskrit *māsa* (month, season) is used as verb,² meaning to be current, as a word or an expression (properly to take place in the time), and is used next to *māsin* or *māsim* (with the same verbal signification) although this word is a substantive, taken from the Malay (being the Arabic موسم).

3. *Srēngēge* (the sun), also *sērngenge*,³ and in the east of the island, as also in Bali, *sēngenge* is contracted from the Kawi *Sang Hyang Ngwe* (the God day), *sang*, prefix, *hyang*, Deity, and *ngwe*, day; *tēngānge* (the time about noon), from the Kawi *tengah ngwe* (half-day), i.e. *tengah* (half) and *ngwe*.

B. The Javanese being fond of dissyllabic words has abbreviated a great many words, and even compounds, by leaving out either a syllable or one of its component parts. To trace them back to their original form we must often resort to the Kawi, as the greatest sagacity is sometimes unavailing, and very often apt to lead us astray. Examples:

1. *Jāmāni* (hell) from *jamānloka* (Kawi, the residence of Yama).
2. *Bismi* (to burn, to be reduced to ashes), from *bhasmibhūta* or *bhasmikrēta* (both words occur as often in Kawi as in Sanskrit).
3. *Dite* (the first day of the ancient Javanese week, and still used in astrological tables), is the Kawi and Sanskrit *āditya* (sun, *dies solis*; in Batak *aditliya* or *adintiya*).
4. *Paris* (a shield), in the dialect of Bantam⁴ still *paris*, from the Malay *parisey* (from the Tamil; in Batak *paritss* or *parinche*).
5. *Angkua* (the hook to drive an elephant), from the Kawi and Sanskrit *angkusa*.
6. *Sindur* (stark red, very red) from the Sanskrit *sindura* (red lead, as in Batak still, where it signifies vermilion).

¹ In Malay still a substantive (food of animals of prey).

² In Javanese it is *mangsa*, and is still a substantive (season).

³ The *r* is often put as a final of the first syllable of words of more than two syllables, e.g. *marmuta* = Sanskrit *manmatha*, *dirgantara* = *dagantara*, etc.

⁴ With the natives Bantén.

This, I think, will suffice to prove that Roorda's opinion is groundless, and that his neglecting the Kawi has made him overlook many words in Javanese which are either corrupted Sanskrit or identical with the corresponding Malay, although seemingly different in sound.¹

ADDENDA.

The Dayak *tānguy* (p. 8, 3) received its *t* from a former *nānguy*, as *n* and *l* are very often interchanged under the influence of another nasal in the same word. In the same way we find in Javanese *līṇḍīh* next to *tīṇḍīh*, which may lead us to the verbal form of this word (*nīṇḍīh*) being the cause of the collateral form *līṇḍīh* (compare p. 19, in the note). By the influence of some passive form, which, according to the genius of these languages, does not differ from that of a substantive, *tānguy* must have become = *lānguy* (Kawi) through *nānguy*, as *t* and *l* are but very rarely interchanged. The identity of Batak *tonggi* or *tēnggi* (sweet) with the Javanese *lēgi* is to me yet a puzzle. Roorda gets rid of the difficulty by supposing the last syllable to be the root, and then by declaring the initial to be a formative consonant, although *l* is not known to have this power.

¹ Hence in his edition of Gericke's *Javanese Dictionary and the Supplement*, which he edited with Meinsma, we find a great many mistakes uncorrected, whilst a great many Malay words have not been compared at the proper places.

ART XVI.—*On the Identity of Xandrames and Krananda.*

By EDWARD THOMAS, Esq.

At the meeting of the Royal Asiatic Society, on the 21st Nov., 1861, I undertook the task of establishing the identity of the Xandrames of Diodorus Siculus and Quintus Curtius, the undesignated king of the Gangetic provinces of other Classic Authors—with the potentate whose name appears on a very extensive series of local mintages under the bilingual Bactrian and Indo-Pali form of *Krananda*.

With the very open array of optional readings of the name afforded by the Greek, Latin, Arabic, or Persian transcriptions, I need scarcely enter upon any vindication for concentrating the whole circle of misnomers in the doubly authoritative version the coins have perpetuated: my endeavours will be confined to sustaining the reasonable probability of the contemporaneous existence of Alexander the Great and the Indian *Krananda*; to exemplifying the singularly appropriate geographical currency and abundance of the coins themselves; and lastly to recapitulating the curious evidences bearing upon *Krananda*'s individuality, supplied by indigenous annals, and their strange coincidence with the legends preserved by the conterminous Persian epic and prose writers, occasionally reproduced by Arab translators, who, however, eventually sought more accurate knowledge from purely Indian sources.

In the course of this inquiry, I shall be in a position to show, that *Krananda* was the prominent representative of the regnant fraternity of the "*nine Nandas*," and his coins, in their symbolic devices, will demonstrate for us, what no written history, home or foreign, has as yet explicitly declared, that the Nandas were Buddhists. Hence we may now conclusively infer, that the revolution which placed Chandra Gupta on the throne, was the result of an effort of Brahmanism to supplant the State Religion, successful for

the time, inasmuch as their priests continued to hold the consciences of this king and his son *Vindusāra* after him, while the grandson, *Aśoka*, though educated in his father's creed, reverted, shortly after his accession, to the local faith, of which he subsequently became so energetic a promoter.

In asserting that the Nandas were Buddhists it is by no means necessary to declare that their creed was identical with the advanced and reformed faith sanctioned by the 3rd Synod under *Aśoka's* auspices; indeed, there is good reason to conclude that the belief of those days retained much of the old leaven of primitive magic and cognate impostures,¹ combined with certain surviving elements of local demonolatry, freely intermixed with rites derived from Scythic and other exotic mythologies: as, under a like law of progressive development, the contrast between this phase of the ancient

¹ An incident in the life of Buddha, related in the *Dulok*, would seem to imply that even among his own relations Śākya's success was supposed to be connected with the practice of Magic. "Lhas-byin, one of Śākya's cousins, the model of a malignant and rancorous person. How he endeavours to acquire the knowledge of the magical art, or of performing prodigies. He applies to Śākya, and upon his refusal to his principal disciples." (*As. Res.* xx p. 84) "Astrology related by Śākya," 516. In another place, however (p. 70), "an astrologer" is stated to have been "converted to Buddhism." The traditions of ancient magic and similar delusions may well have retained a place in domestic legends, over extensive tracts of outlying country, ready to reassert themselves at any moment, under similar conditions of society—which in its singular stagnation retained below the surface most of these ancient elements intact, prepared alike for the reformers, or at the service of those who desired to rehabilitate the older creeds under the mask of the more advanced religious current in the land—which tendency may possibly in itself account for the reception of so many early heresies and marked absurdities into the later Tantrik rituals; See Wilson's *Essays on the Religion of the Hindus*, ii. p. 75; *As. Res.* xvi., xvii. For other references to magic, see Wilson's Works, Trübner, London, 1862, i. 23, 26, 248, 256; ii. 377, iii. 168, 175 (*Yoga Nanda*) 354 (*Magic taught*) 368, 373; iv. 130, 152, v. 109 (*Yoga*) 143. Mr. Caldwell has instituted an interesting inquiry into the ancient religion of the Dravidians, the result of which he states as follows "On comparing this Dravidian system of demonolatry and sorcery with 'Shamanism'—the superstition which prevails amongst the Ugrian races of Siberia and the hill tribes on the south-western frontier of China, which is still mixed up with the Buddhism of the Mongols, and which was the old religion of the whole Tartar race before Buddhism and Mohammedanism were disseminated amongst them—we cannot avoid the conclusion that those two superstitions, though practised by races so widely separated, are not only similar but identical."—*Dravidian Grammar*, p. 519. A connexion Mr. Hodgson has further illustrated, *J.R.A.S.* xviii. p. 397. See also *Mahāwanso*, p. xlv. "It would appear that the prevailing religion in Lankā, at that period, was the demon or *yakkha* worship."

For further illustrations of the general question, see *J. R. A. S.*; Stevenson, v. pp. 189-246: vi. 239; vii. pp. 1-64; Wilson, xii. 238, xiii. 105, 273; Briggs, xiii. pp. 282 (note 7), 285, 290, 304.

religion and that of the nineteenth century is exemplified by the limited theological range of the Edicts of Aśoka, which on their first publication were pronounced by a very high authority to be altogether wanting in the spirit of later Buddhism.¹

Both Buddhism and Brahmanism borrowed largely from preëxisting local ideas and superstitions, of which they are found to hold so much in common; neither one nor the other need be deemed a simple emanation from or reform of its rival, but both admitted with little reserve many of the vague realizations already formulated in situ, where priestcraft had been aided by growing civilization, parallel intellectual culture, and occasional contributions from without, in building up religious systems adapted to the credulity and courting the adhesion of the community at large.

Buddhism confesses to an Indian home, Brahmanism seeks to conceal its obligations to similar local influences, but if the pure Aryans in their other migrations arrived at no parallel theogony, no like perfection of speech, their southern section must in all reason be made to concede much to the philosophy and literary refinement of the nation, among whom these pretendedly independent advances were accomplished; more especially must they submit to some such admission, now that the internal evidence of their *own* Vedas has proved conclusively what crude barbarians they were on their first entry into the Punjáb, and what erudite scholars and immaculate hierarchs they represent themselves, with more or less reason, to have become, during their progress towards and residence on the banks of the Saraswati. Hence, the less the matured faiths of the twin Aryan races of Persia and India are found to accord, the more must the latter and less accessible soil claim to have changed the spirit which dominated over the one and the other in their joint *nidus*.

If the simple Aryan faith verged towards Chaldean originals in Persia, analogous causes may naturally have produced similar results in the devotional culture of the more easterly migration, and Brahmanism need scarcely resent the

¹ Wilson, J.R.A.S. xii. p. 236.]

inference that some of the afflatus of its early success was derived from the exoteric worship and religious tendencies prevailing in the land in which its organizers were avowedly domesticated. Carrying out these comparisons of geographical influence and ethnic predilections upon divergence of ritualism, it may be doubted whether greater and more direct effects were not often due to subdivisional or provincial jealousies, and whether such tendencies may not materially have affected both Brahmanism and Buddhism in their indigenous growth. Śākya's mission, issuing from the land of his nativity, Kapīla, was mainly confined in its immediate contemporary progress to Magadha or Behār;¹ we hear nothing of its effects upon the people of the upper Jumna, while the course of Brahmanic institutions after their adaptation from crude Vedic conceptions and amalgamation with the tenets obtaining on the banks of the Saraswati, was clearly downwards from the chosen *Brahmarshi*, towards the kingdoms of the mid-Ganges, where Śākya's teaching had been so well received.² This suggestion again opens out a larger field of enquiry as to whether the Brahmanical element in its religious significance is not typified amid the ancient legends, of the *Chandra Vanṣas* and the *Puravas* of the north,³ as opposed to the popular history of the *Sūrya Vanṣas* of Oude,⁴ who supported the less mixed and more locally matured faith of Gautama.

The classic historians of Alexander the Great, in adverting to his final halt on the banks of the Hyphasis, refer to the information incidentally obtained on the spot regarding the monarch of the Gangetic kingdoms, whose numerically overwhelming forces the Macedonian army must have been prepared to encounter had their leader persuaded them to advance further into India. Diodorus Siculus has preserved the name of the king in ques-

¹ J. A. S. B. vii. 1013. *Dulva*. As. Res. xx. pp. 61, 64, 65-74, 89, 91, 290, and especially p. 435.

² *Manu*. ii. § 17.

³ See the coin figured as No. 1, Plate vii. vol. i. Prinsep's *Essays*, J. A. S. B. iii. pl. xxv. fig. 1. On this piece we have possibly the first instance of the use of the detached half-moon associated with the name of the Vishnu deva in the old Pali characters. It is instructive to note further the Royal title of *Chandra Gupta*, and the real name of *Chūpakya*, i.e. *Vishnu Gupta*. See also St. Martin, *Jour. des Sav.* vol. v. (1858) p. 142.

⁴ Turnour, *Mahawanso*, p. 9, J. A. S. B. vii. 927.

tion under the Greek transcription of *Ξανδράμης*,¹ and Quintus Curtius reproduces it in Latin as *Aggrammes*.² Whatever may be the imperfection of the phonetic rendering of *Xandrames*, as representing the oral sound of *Kraṇanda*, it is abundantly clear that the names of *Ξανδράμης* and *Ξανδρόκυπτος* were not primarily derived from one and the same Indian designation, notwithstanding that *Xandrames*, or the localized *Chandramas*, may be ingeniously converted into a similitude of *Chandra Gupta*.³ The toning down of *Xandra-*

¹ Ἀκούσας δὲ τοῦ Φηγέως περὶ τῆς πέραν τοῦ Ἰνδοῦ πενταμοῦ χώρας ὅτι δάδεκα μὲν ἡμερῶν ἔχει διόδον ἔρημον, μετὰ δὲ ταύτην εἶναι ποταμὸν τὸν ονομαζόμενον Γάγγην, τὸ μὲν πλάτος τριάκοντα καὶ δύο ἑκατὸν σταδίων, τὸ δὲ βάθος μέγιστον τῶν κατὰ τὴν Ἰνδικήν, πέραν δὲ τούτου κατοικεῖν τὸ τε τῶν Πραισιῶν καὶ Γανδαριῶν ἔθνος, τούτων δὲ βασιλευνὶ Ξανδράμῃν ἔχοντα διςμυρίας μὲν ἱππεῖς, περὶ δὲ εἰκοσι μυριάδας, ἄρματα δὲ διςχιλία ἐλέφαντας δὲ πολεμικῶς κεκοσμημένους τετρακισχιλίους, ἀπιστήσας δὲ τοῖς λεγομένοις προσεκαλέσατο τὸν Πάρον, καὶ περὶ τῶν προσαγγελλομένων τάκριβες διεπυνθάνετο. ὃ δὲ τὰλλα μὲν ὑπάρχον ἅπαντα ἀληθῆ διεβεβαίωτο, τὸν δὲ βασιλεῖα τῶν Γανδαριῶν ἐφησεν ἐντελὴ παντελῶς εἶναι καὶ δοξάζον ὡς ἂν κορυβῶς νῦν νομιζόμενον εἶναι, εὐπρεπὴ γὰρ ὄντα τὸν τούτου πατέρα μεγάλως ὑπὸ τῆς βασιλείας ἀγαπηθῆναι, καὶ τοῦ βασιλέως διὰ τῆς γυναικὸς δολοφονηθέντος εἰς τοῦτον περιστῆναι τὴν βασιλείαν.—Dion. Sic. lvi. c. 93.

² ix. i. § 35. Relicto igitur Sophite in sua regno, ad fluvium Hypasin processit, Hephelastione, qui diversam regionem subegerat, conjuncto. 36. Phlegens erat gentis proximus rex, qui, popularibus suis colere agros, ut assueverant, jussit, Alexandro cum quibus occurrat, nihil quod imperaret detrectans.

ii. § 1. Buluum apud eum substitit et x. tertio die annem superare doctorensit, transitu diff. vlen, non spatio solum iquarum, sed etiam satis impeditum. 2. Percontatus igitur Phlegem, quæ nescenda erant, xi. dierum ultra flumen per vastas solitudines iter esse cogitavit. 3. ultimorem ripam colere gentes Gangaridas et Pharrasios, eorumque regem esse Aggrammem. xi. milibus equitum ducentisque peditum obaidentibus. 4. ad hanc quadrigam duo milia trahere et precipuum terrorem elephantes, quos trium milium numerum exphre dicebat. [Five variants of the name are given, Aggramen, Aggrammem, Agrame, Agramen Aggramem.] 5. Incredibilia regi omnia exhibebantur igitur Perum (nam cum eo erat) percontatur, 'an vera essent, quæ dicebantur?' 6. Ille 'vires quidem gentis et regni haud falso jactari' alfirmat. 'ceterum, qui regnaret, non modo ignobilem esse, sed et in ultimæ sortis quippe patrem ejus tonsoritur vix diurno questu propulsantem famem, propter habitum haud indocum, cordi fuisse regina.' 7. Ab ea in proximam ejus, qui tum regnasset, anathem locum adnotum, interfecto eo per insidias, sub specie tuteliæ liberum ejus invasissæ regnum, necatisque pueris huius, qui nunc regnat, generasse, invictum valemque popularibus, magis paternæ fortunæ, quam suæ memorem.—Quintus Curtius, ed. Delph. London, 1825, vol. ii. 876.

³ Wilford, Asiatic Researches, i. p. 286. Max Müller, Sanskrit Lit. p. 279.

The jealous scrutiny to which the action of the Patent Laws in England has lately been subjected, has shown now few modern ideas are positively and completely original. Hence, it becomes the duty of the humblest aspirant for the honors of even a new combination, to record, in all fullness, any previously published suggestions towards the same end, however little they may have conduced to the immediate and ultimate result he undertakes to announce. As far as my guidance towards an identification of *Xandrames* and *Nanda* is concerned, the earliest claim must unhesitatingly be conceded to the

mas into Aggrammes need suggest no more difficulty than the elision of the Σ in Ἀνδρόκοπτος , or other more gross perversions of the indigenous term. So also in regard to the very circumstantial statements of the low origin of Xandrames, as tending to connect him to such an extent with Chandra Gupta, the confessedly questionable offspring of Nanda! These detractional charges, in themselves, would scarcely serve to establish any identity, even if the whole question of any intentional association of Xandrames and Chandra Gupta by the classical authors at large was not set at rest by Plutarch's definitive discrimination of the two individuals in closely connected passages of his text. Possibly his mention of the authority for the statement may point to the true explanation why the extinct dynasty came to be so well abused when Chandra Gupta himself became the accuser, who may naturally have sought to obscure his own special defects in the vilification of his predecessors. Quintus Curtius manifestly applies after-events to the Nanda, whose name had so imperfectly reached Alexander's contemporaries, in the allusion to the Queen (Mura), the Brahman Chānakya, who kills off the other sons, and who begets or advances the last *reputed* son of the old monarch. On the other hand, Arrian, with more critical

much abused Wilford; to whom, I think, fair credit has never yet been given by succeeding critics. It was easy to say an Englishman was in the hands of his Pandits in those days; they *all* were!—but the singular fact remains, of how much information, based upon honest though imperfect interpretation, and how comprehensive, though at times overstrained, a faculty his master mind was able to bring to bear on the amalgamation and elucidation of Eastern and Western knowledge, as tried by either one or the other test in India, at the commencement of the present century.

Wilford, in 1797, endeavoured to substantiate the identity of Xandrames and Chandra Gupta, under the approximate rendering of *Chandramas* as the local equivalent of both the Greek and the Sanskrit version of the real name (*As. Res.* v. 286). He subsequently, in 1807, clearly abandoned this mere suggestion, and took up the position that the Xandrames of Alexander's historians was simply the reigning Nanda of that day (*As. Res.* ix. 94). Max Muller, possibly without being aware of the one assimilation, or the other more complete association, seems to accept in a measure the nominal similitude, though securing himself by supposing that Xandrames might be "the same as the last Nanda" (*Sanskrit Literature*, p. 279). General Cunningham, who has always had a leaning towards phonetics—in his younger and bolder days used to say that Kunanda, as the name so manifestly suggested, was one of the nine Nandas—but as even this "courageous etymologist," as Wilson called him (*J. R. A. S.* xvi. 230), has not ventured to adhere to his guess in his more mature writings (*Bhulas Topes*, 1854, p. 355), I conclude he will not now seek to disturb the grave of Wilford.

acumen, concedes all honour to the ruling powers beyond the Hyphasis, as he even partially realised the merit of the oligarchical form of government obtaining in those provinces,¹ in apposition with and contrast to the monarchical institutions prevailing to the westward, where Alexander's early conquests had first impressed the Greek mind with a notion of local customs: an indication which, however vague, may prove of important significance in the present inquiry.

The Arab authors—usually mere copyists from the Persians, who claim to have preserved all ancient traditions in their exclusive Pahlavi writings—though dating later in point of time, naturally follow, in the order of this enquiry, the classical and equally foreign exponents of Indian history. Their evidence, whether in text or translation, may still carry with it the mark of high authenticity, especially if it retains in itself signs of original truth, and indications of derivation, however imperfect in details from contemporaneous sources. Notwithstanding the many marked historical coincidences and other connecting analogies, it would have been venturesome to have based the identification of Ξανδράμης and the *Krananda* of the coins upon the imperfect similitude of the two names as they stood in simple relation to each other; but the retention of the designation in the form of *Kand* by the Arabic authors, restores the most important element of the name in the initial K. Mas'ûdi, who follows Ibn Mokaffâ (Obit. 277 A.H.), in his *Indian history*, tells us that Alexander, after having disposed of Porus, entered into correspondence with one of the most powerful kings of India

¹ Lib. liii. 9. Ἐλέγοντο γὰρ ὀκτώ μὲν μυριάδας ἱπποτῶν, εἰκοσι δὲ πτεῶν. ἄρματα δὲ ὀκτακισχίλια καὶ μαχίμους ἐλέφαντας ἐξακισχίλιους ἔχοντες οἱ Γανδαριτῶν καὶ Πραισιων βασιλεῖς ὑπομνέειν. Καὶ κύμπος οἷκ ἦν περὶ ταῦτα. Ἀνδρόκοττος γὰρ ἴστερον οὐ πολλῷ βασιλεύσας Σελευκῷ πεντακοσίους ἐλεφάντας ἰδωρήσατο καὶ στρατοῦ μυριάσιν ἐξήκοντα τὴν Ἰνδικὴν ἐπὶ ἤλθεν ἄσασαν καταστρεφόμεναι. . . li. 26. Ἀνδρόκοττος δὲ μεираκιον ὡν αὐτὴν Ἀλεξανδρον αἶδα καὶ λέγεται πολλὰς εἰπεῖν ὑστερον ὡς παρ' οὐδὲν ἦλθε τὰ πράγματα λαβεῖν Ἀλεξανδρῳ. μ. σουμενον τε καὶ καταφρονουμενου τοῦ βασιλέως διὰ μοχθηρίας καὶ δυσγένοιαν. — P. H. N. de l'Inde, Lippia, 1543, p. 204.

Τὰ δὲ πέραν τοῦ Ὑφάσιος ποταμοῦ, εἰς δαίμονά τε τὴν χώραν εἶναι ἐξηγγέλλετο, καὶ ἀνθρώπους ἀγαθοὺς μὲν γῆς ἐργάτας γενναίους δὲ το πολέμια, καὶ εἰς τὰ ἴδια δὲ σφῶν ἐν κόσμῳ πολιτευομένους. Πρὸς γὰρ τῶν ἀρστων ἀρχεσθαι τοὺς πολλοὺς, τοὺς δὲ οὐδὲν ἔξω τοῦ ἐπικικοῦς ἐξηγεῖσθαι. — Arriani Exped. Alexandr. Lib. iii. c. xxv.

named *Kand*.¹ This monarch is represented as ruling over a distant part of the country, the exact locality of which is not specified. He is stated, in opposition to classical testimony, to have borne the highest character for wisdom, virtue, and good administration; and the singular item is mentioned in reference to the length of his life [or reign], which, though distorted in the repetition, seems to identify him directly with the Hindu traditional "one hundred years" of the rule of the Nandas. The intercourse by ambassadors which ensues relates mainly to the question of magic and the four marvels of necromancy with the inexhaustible cup, which figures in so many fairy tales, possessed by the Indian king. The same stories of the two monarchs are embodied in the *Sháh Námah*, but by a transposition of the diacritical points the king's name appears as كيد instead of كند.² Though the trilateral كند is little more than what M. Renan calls "a Semitic skeleton" of a word, it retains the three leading letters of the original कण्ड, and is readily improved by the insertion of the short vowels, while the missing *r* may easily have been lost sight of in the mechanical conversion of the Sanskrit letters; but there is no need to insist upon minor possibilities when the identical name has been reproduced elsewhere in a far closer though altogether independently-devised form of transliteration.

¹ Mas'udi, chap. xxvi.

لما قتل الاسكندر فور صاحب مدينة المانكير من ملوك الهند وانقادت اليه جميع ملوك الهند على حسب ما ذكرنا من حمل الاموال والخراج اليه بلغه ان في اقصى ارض الهند ملكا من ملوكهم ذو حكمة وسياسة وديانة وانصاف للرعية وانه قد اتى عليه من عمرة مئتين من السنين وانه ليس بارض الهند من فلاسفتهم وحكمائهم مثله يقال له كند

[One MS. No. 23,266 Mus. Brit. gives the name as كيد].

² *Sháh Námah*, Chap. (headed)

لشكر كشیدن سكندر سوي كيد هندي و نامه نوشتن بدو
آوردن ده مرد دانا دختر و جام و پزشك و فيلسوف از كيد هندي
نزد سكندر

tion. The author of the Persian text of the *Majmal-ul-Tawārīkh*, who dates from the court of Sanjar bin Malik Shāh, in A.H. 522, after acknowledging to have derived his information through the secondary medium of a Persian translation made in A.H. 417, from an Arabic author of earlier standing, who, however, drew his inspiration *direct* from Indian sources,³ goes on to quote similar tales of Alexander and the king he names as قفند, whom he specially indicates as 'the same' as the کید of the Shāh Nāmāh. Considering that a very slight turn of the pen would suffice to convert the second letter of this name from an *z* into an *ā*, it will be scarcely taking much liberty with extant MSS. to restore the former letter to its proper place, and rehabilitate M. Reinaud's *Kefend* into قند *Kananda*, a licence the text itself encourages, in reproducing the son's name as *Ayanda*, a very obvious mistake for اند *Ananda*. Not that I would desire to cite these Arab or Persian writers for the solid history or geography of India, when the latter are seen to make Porus king of Kanauj, and the former base most of their early notions of Indian kingdoms upon the limited centre they occupied on the lower Indus; but with all this, their incidental notices may chance to prove, under proper checks and criticism, of considerable value.

Among the various sources for the illustration of the subject under review, the Ceylon Annals, perhaps, exhibit the nearest and most exact adherence to pure legendary history the Indian mind was, at this period, capable of realizing: emanating, in regard to their facts, from the original site of Buddhism, whose religious verity constituted so cardinal a point in their record: embodying a series of incidents how-

³ *Majmal-al-Tawārīkh*.

اما كتابي ديدم قدیم از آن هندوان كه ابو صالح بن شعیب بن جامع
از زبان هندواني بتاری ترجمه کرده بود و ابو الحسن علی بن محمد
الحلبی خازن دار الکتب جرجان در سنه سبع عشره واربعمایه
آنها را پارسی کرده بود

M. Reinaud "Fragmenta Arabes et Persana." Paris, 1845, p. 1.

ever imperfectly reported, and however long subject to the disadvantage of merely oral or partially written mechanism, still following very closely upon the events, and speedily becoming crystalized into the fixed form, which was preserved, in all its simplicity, under the protection of a dominant and undisturbed hierarchy, in an insular and comparatively unassailable kingdom. An immunity which clearly was not shared by the parallel chronicles of India proper, and for the historical portions of which we have to rely mainly upon Brahmanic authorities, whose compositions are not only so much later in point of time, but were liable to be affected by indifference to, if not a more directly hostile feeling against a race of kings under whose auspices antagonistic Buddhism attained so much local prominence.

The most important item the Ceylon Annals contribute towards Kāśyapa's history consists in the statement that *the nine Nandas* reigned "conjointly."¹ The bearings of this question will have to be adverted to more at large hereafter; but to dispose of the independent home testimony upon this point, it will be sufficient to refer to the various analogous passages in the secular Sanskrit works and in the pseudo-

¹ Mahāwanso, p. 21. "Kāśyāko had ten sons, these brothers (conjointly) ruled the empire, righteously, for twenty-two years. Subsequently there were nine; they also, according to their seniority, righteously reigned for twenty-two years. Thereafter the Brahman Chānakkō, in gratification of an implacable hatred borne towards the ninth surviving brother, called Dhana-nando, having put him to death," etc.

Mahāwanso, p. xxxviii from the commentary (the *Tika*): "Subsequent to Kāśyāko, who patronized those who held the second convocation, the royal line is stated to have consisted of twelve monarchs to the reign of Dhammāśoka, when they (the priests) held the third convocation. Kāśyāko's own sons were ten brothers. Their names are specified in the Atthakathā. The appellation of 'the nine Nandos' originates in nine of them bearing that patronymic title. The Atthakathā of the Uttarawihāro priests sets forth that the eldest of these was of an extraction (maternally) not allied (inferior) to the royal family, and that he dwelt in one of the provinces. It gives also the history of the other nine. In aftertime, during the conjoint administration of the (nine) sons of Kāśyāko, xxix. . . His brothers next succeeded to the empire in the order of their seniority. They altogether reigned twenty-two years. It was on this account that (in the Mahāwanso) it is stated that there were nine Nandos. Their ninth youngest brother was called Dhana-nando, from his being addicted to hoarding treasure. [He is subsequently stated to have] abandoned his passion for hoarding, becoming imbued with the desire of giving alms," etc.

Buddhaghosa's *Atthakathā* has "the ten sons of Kāśyāko reigned thirty-two years. Subsequently to them, NAWANANDO reigned twenty-two years. CHANDAGUPTO twenty-four years."—J. A. S. B. vi. 726; Mahāwanso, p. lii.

prophecies of the Purāṇas,¹ which if they do not directly confirm the existence of such a system of oligarchal government, fully justify the acceptance of the Singhalese version of a combined family sovereignty of some kind or other.²

The Greek authors, who follow Megasthenes, had already made known the existence of popular forms of government in India. Diodorus Siculus affirms that, in early times, the majority of the cities were administered by democracies, monarchies forming the exception up to the invasion of Alexander.³ Arrian discriminates the autonomous townships

¹ Vishṇu Purāṇa, p. 467. His son will also be Nandī-varddhana, and his son will be Mahānanda. These ten Śaśunāgas will be kings of the earth for three hundred and sixty-two years. The son of Mahānanda will be born of a woman of the Śūdra or servile class, his name will be Nanda, called Mahāpadma, for he will be exceedingly avaricious. Like another Parāśarāṇa, he will be the annihilator of the Kṣhatrya race, for after him the kings of the earth will be Śūdras. He will bring the whole earth under one umbrella, he will have eight sons, Sumūlya and others, who will reign after Mahāpadma, and he and his sons will govern for one hundred years. The Brahman Kautilya will root out the nine Nandas. Upon the cessation of the race of Nanda, the Mauryas will possess the earth, for Kautilya will place Chandra Gupta on the throne.

[Professor Wilson adds the following additional notes —]

"The Bhāgavata calls [Nanda] Mahāpadmapati, the lord of Mahāpadma! which the commentator interprets 'sovereign of an infinite host,' or of 'immense wealth,' Mahāpadma signifying 100,000 millions. The Vāyu and Matsya, however, consider Mahāpadma as another name of Nanda."

The Bhāgavata also ["[as, 'he and his sons']," but it would be more compatible with chronology to consider the nine Nandas as so many descents. The Vāyu and Matsya give eighty-eight years to Mahāpadma and only the remaining twelve to Sumūlya and the rest of the remaining eight, these twelve years being occupied with the efforts of Kautilya to expel the Nandas."

The several authorities agree in the number of ten Śaśunāgas, and in the aggregate years of their reigns, which the Matsya and the Bhāgavata call 360, the Vāyu has 352. . . . The Vāyu and Matsya call the Śaśunāgas Kṣhatra-bandhus, which may designate an inferior order of Kṣhatryas. They also observe, that cotemporary with the dynasties already specified, the Pauravas, the Vārhadrathas and Māgadhas, there were other races of royal descent, as Atikṣhwakara princes, 24, Panchāras, 25. . . . Kālakis or Kāsakas or Kaseyas, 24, Hathayas, 24, Kālingas, 32, Śakas, Aśmakas, Kuravas, Mathilas, Surasenas, and Viti-hotras. — See also Wilson's Essay on Sanskrit Literature, i. 133.

² For further evidence of the co-ordination of the nine Nandas, see Wilson's 'Mudrā Rakṣhasa,' Hindu Theatre, ii pp 144-5-6. PREFACE "The king when he grew old retired from the affairs of state, consigning his kingdom to these nine sons," etc. TEXT, verses 166-7, p. 181

A subsequent passage incidentally proves that the idea of joint kings was by no means foreign to the practice of the day

"Vairochaka and Chandra Gupta, seated
On the same throne, installed as equal kings,
Divided Nanda's empire"

See also Asiatic Researches, v. 266

³ Diod Sic. ii c 39, § 38. Ὀππερον δὲ πολλοῖς ἔτεσι τὰς πλείους μὲν τῶν πόλεων δημοκρατήσθαι, τινῶν δὲ ἰδόντων τὰς βασιλείας διαμεῖναι μέχρι τῆς Ἀλεξάνδρου διαβάσεως.

of the Panjáb,¹ adverts to the rule of the nobility on the Ganges,² and contrasts, in marked detail, the difference between regal government and the functions of a chief magistrate of a free city.³ Quintus Curtius also speaks of "*validam Indiæ gentem, quæ populi, non regum imperio regebatur*" (ix. c. viii. § 4). The local annals, in like manner, incidentally contribute frequent evidences of the prevalent republican institutions; tradition has preserved various notices of the Republic of Vaiṣālī (Bassahr), as it was administered in the time of Śākya; and the history of the distribution of his ashes casually discloses, that of the ten portions into which they were divided, eight fell to the share of republics or tribal cities, and one to a king.⁴ There are no data for determining the exact form of these constitutions, though they are seen to have been far beyond any mere intramural municipality. The city clearly dominated over the country around, and constituted to all intents and purposes a State. The number of citizens participating in administrative functions appears to have been considerable among the Lichhavis of Vaiṣālī,⁵ but in all cases there were one or more chiefs, whether magistrates, tribunes,⁶ or rajas.⁷

In addition to the written testimony, as to the prevalence of republics to the northward and eastward of India, they seem to have been elsewhere complete enough in their political as well as fiscal details, to have left illustrative numismatic traces behind them, in the extant coins of the Śāh kings of Surāshtra, which in their make, extreme range of dates, and

¹ Exped. Alexandri. c. xxiv.

² Ibid. c. xiv., quoted p. 453 ante.

³ Arrian Indica. xii. 10. ἔκτοι δὲ εἰσιν Ἰνδοῖσιν οἱ ἐπίσκοποι καλεόμενοι οὗτοι ἐφορῶσι τὰ γινόμενα κατὰ τὴν χώραν καὶ κατὰ τὰς πόλεις. Καὶ ταῦτα ἀναγγέλλουσι τῷ βασιλεῖ, ἵνα περ βασιλεύονται Ἰνδοὶ ἢ τοῖς τέλεισιν, ἵνα περ ἀνέννομοι εἰσι. The passage varies in Strabo, xv. c. 1, § 40. But he elsewhere adverts to an aristocratical form of government, xv. c. 1, § 37. See also Pliny, Hist. Nat. vi. 20.

⁴ As. Res. xx. 439. Jour. As. Soc. Bengal, vii. 1013. Bhilsa Topes, p. 29.

⁵ Mr. Turnour remarks in a note, p. 992, vol. vii. J. A. S. B. "These rajas or rulers were of the Lichchhavi dynasty, the capital of whose dominions, called Wajji, was Wcśāli. The union of the Wajjian states is stated to have consisted of a confederation of chiefs or princes."

⁶ As. Res. xx. pp. 66, 69, 72; J. A. S. B. i. 4.

⁷ Foekoueki, 240, 251, note 8, Klaproth: "Il paraît que quoique les habitants de Vaiśali eussent une forme de gouvernement républicaine, ils avaient pourtant aussi un roi."

repeated identity of the annual records stamped on their surface, have for long past,¹ on mere mechanical grounds, suggested the inference of an emanation from mints under the temporary control of one or more rulers. The working of such an administrative government is not opposed to the recognition of a Greek or any other more immediate native suzerainty—which external supremacy need in no wise have impaired the normal elements of the original constitution, framed probably upon the same theoretical model as had served to raise up similar institutions on the banks of the Ganges. The supposition of a conjoint administration is almost demanded in this instance by the fact, that among the Sáh kings, no less than four, if not five, sons of Rudra Sáh and three sons of Dáma Sáh are found to have been endued with regal honours.

The sovereignty of the nine Nandas may be conjectured to have been based upon the same principle of coequal brotherhood or coparcenary, that prevails to this day so extensively in the North-Western Provinces under the general designation of *Bhayáchára* tenures. In these proprietary fraternities, perfect equality of inheritance constitutes the leading idea with the practical concession for the good of the community, that there should be one responsible manager, usually the elder brother, who is primarily entitled to this post, and whose seniority is invariably respected, though his administrative authority is frequently set aside for the benefit of the joint estate, and bestowed upon a more efficient junior.² The supposition of some combination of this sort seems to afford the most simple explanation of the legends on the coins admit of; viz. that the name of Amogha, otherwise clearly superfluous, was retained as the first-born of the joint-brotherhood, and Krananda, in acknowledging this priority, and describing himself as "the brother of Amogha," leaves him intentionally untitled, while he assumes to himself the proud position of *Maharāja*, or the executive

¹ Jour. R. A. S. (1848), vol. xii pp. 39, 40, 41, Prinsep's Essays, vol. ii. p. 92.

² See Sir H. M. Elliot's Glossary of Indian Terms, *sub voce* Bhayáchára and his Settlement Circular orders, N.W.P.

"*primus inter pares*" of the family oligarchy. Necessarily, the supreme ruler of vast kingdoms exercised much more extended and independent powers than would have devolved upon him under a similarly constituted election to the management of the affairs of an agricultural community; but the theory and practice would be analogous in either case, though the possession of Imperialism would be less easily disturbed than the patriarchal intendency of the village system.

As the identification of the Greek Sandroktopos with the Sanskrit Chandra Gupta proved of the highest importance in adjusting the general scheme of Indian dates, so the ascertainment of the sovereignty of Krananda on the Ganges, when Alexander retired from the Hyphasis in 326 B.C.,¹ in furnishing an earlier and far more precise date towards the rectification of the local annals than the undetermined epoch of the expedition of Seleucus and his treaty with Chandra Gupta² may be expected in a higher degree to illustrate and determine the many debateable points of contemporary Indian chronology. As a preliminary I may state that I adopt almost unconditionally the Ceylon traditional date of the Nirvāṇa of Sākya Muni, *i.e.* 543 B.C., as the Singhalese were the only nation among the early converts who definitely accepted the era of Buddha for civil or religious reckonings, a practice so consistently adhered to that, to this day,³ the local almanacs appear with Anno Domini and Anno Buddhæ in parallel columns. Objection has been taken to the probable exactitude of the initial date, because its use did not become general in the hierarchal calendars till after the reign of Asoka;⁴ but even the very admission involved in the protest concedes a value and importance to the vehicle which preserved with all apparent good faith the historical epoch, whose inception must have been recently notified from the land where the incidents, out of which it arose, took place, and fully within the limits of rectification, had

¹ Clinton, p. 191, 8vo. edition, Oxford, 1851

² Clinton *Fast. Hellen.* iii. 482, note

³ Turnour *J.A.S.B.* vi., pp. 722.

⁴ Max Müller, *Sanskrit Literature*, p. 264.

any doubts of its accuracy presented themselves. It is not necessary to the correctness of this foreign legendary date of the Nirvāṇa, that the Ceylon local annals should accord in full parallelism, though such an attempt was made, in a crude way, in the endeavour to fix the advent of Vijaya at the identical cyclic epoch;¹ nor need we criticise too closely the subordinate chronological details, which reached the island regarding the Māgadha succession: for all purposes of a test of intentional veracity, there remains enough of truth preserved in their text, and in some instances a nearer adherence to facts than the counterpart annals were permitted to retain on their own soil. The Southern date of 543 B.C. recommends itself indirectly in two cases of imperfect testimony obtained from purely Indian sources. The Tibetan Books, in citing the various dates assigned to Buddha, give the extreme range of from B.C. 546 to B.C. 2422.² Now as the tendency of all such commentators would naturally incline towards exaggerating the antiquity of the foundation of their creed, there would be much reason to prefer the lower figures, even if they did not assimilate so nearly to the independent affirmation of the basis of the era received in Ceylon. Again, there is a curious approximation to this same initial reckoning contributed centuries later by Hiuen T'sang, who in his description of Kusinagara in A.D. 648 adverts to the uncertainty existing *in situ* regarding the true epoch of Sākya's decease, and he goes on to state the various computations then current, the very first of which being 1200 years prior to the existing date—the even number of centuries quoted dispenses with any pretence of exactitude—but singular to say the arithmetical result gives the approximate year of 552 B.C.*

* Turnour J.A.S.B. vi. (1837) pp. 718, 720, Mahāwanso, p. li.

¹ Csoma, Tibetan Grammar, p. 199. Professor Wilson also cites no less than thirteen different dates, collected by a Tibetan author, ranging from 2420 B.C. to 453 B.C., three figures which suggest in themselves an erroneous transposition of the copyist for 543. Wilson J.R.A.S. xvi. p. 247, and Dr. Rost's edition of Wilson's works, vol. ii. p. 345.

² Suivant l'Histoire de la vie de Hiouen-t'sang, p. 304, le Ta-thang-si-yu-ki a été rédigé en 648. D'après ce premier calcul, (1200 B.C.) l'époque du Nirvāṇa remonterait à l'an 552 avant J. C. La seconde opinion (1300 B.C.) le fait remonter à 652, la troisième opinion (1500 B.C.) à 852, et la quatrième (de neuf cent à mille ans) entre 252 et 352. La première date est celle qui rapproche le

There is also an item of negative evidence in support of this Buddhist date which is not without its significance. **Buddhaghosa**, the **Māgadha Brahman**, the eloquent and energetic convert to Buddhism, who in the earlier part of the fifth century A.D. made a pilgrimage to recover the Singhalese version of the **Aṭṭhakathā**, which was not extant in his native land,¹ not only did not contest or question the epoch of 543 B.C., but adopted it in all its integrity as the basis of his very elaborate attempts at the reconciliation of the conflicting dates in the national histories of the two countries;² though in the imperfection of the materials bearing upon the regal successions of India the adaptation proved considerably at fault.

There is yet another test, *ab extra*, of no very great value in itself, but the items contributing to which give a singularly near result to the Ceylon calendric standard. Few enquirers will be prepared to contest the simple proposition that **Śākya Muni** flourished while **Ajātaśatru** sat on the throne of Magadha. The various Brahmanical Purāṇas, in enumerating the successions and lengths of reigns between the eighth year of that monarch and the accession of **Chandra Gupta**, give the closely associated totals of 260 and 261 years; now, taking the elevation of **Chandra Gupta**, the chosen criterion of European chronologists, at 316 B.C., the **Nirvāṇa** of **Buddha** will fall, under this reckoning, in B.C. 576, giving a total of 33 years only in excess of the Singhalese era, a surplus that may fairly be subjected to critical reduction, when tested by the exaggerated average³ involved in the 33 years assigned to each of the five kings, comprising the second half of the **Śaiṣunāga** dynasty, whose general average for the ten successions ranges even more suspiciously high at 36.5 per reign.

plus de celle des Cingalais (543), qui paraît généralement adoptée. Stan. Julien. ii. 335. General Cunningham, who has a tendency to averages, arrives by that unsatisfactory method of rectification at a still closer approximation to the Ceylon date, in the return of 544. Bhuṣa Topa, p. 74.

¹ Turnour J.A.S.B. vi. (1837) pp. 507, 717. Mahāwanso, p. xxx. and chapter xxxvii., p. 250.

² J.A.S.B. vi. 725. Mahāwanso, p. lii.

³ Col. Tod's average of 119 kings gives a return of 22 years per reign (i. 52). Wathen (J.R.A.S. v. 346) with an average extending over 535 years produces 25 years, while the Walter Elliot inscriptions (J.R.A.S. iv. 6) reduce the term to 17.7 years. See Note J.R.A.S., xii. p. 36.

The Hon. George Turnour, to whom we are mainly indebted for our present knowledge of the question, investigated with much care the Singhalese chronology of the period intervening between the Nirvāṇa of Śākya and the accession of Aśoka, the result arrived at being that if the former date fell in B.C. 543, the accession of Chandra Gupta must have been antedated in the southern system some 60 or 70 years. Mr. Turnour rightly divined that the cause of this error would probably be found in the undue limitations of the reigns of the Nandas, which will be seen from his table quoted below,¹ to have been reduced to 44 years in all. General Cunningham has suggested a very simple and reasonable method of correcting this deficiency by restoring to the Nandas collectively² the approximate 100 years the Sanskrit

¹ "The chronological data contained in the *Aṭṭhakathā* on the *Pitakattaya*, and in the *Mahāvaṃsa*, connected with the history both of India and of Ceylon, exhibit, respectively, in a tabular form, the following results —

INDIAN TABLE.

| Accession of each King. | B. C. | B. B. | Reign Years. | |
|-------------------------|-------|-------|--------------|--|
| Bimbisāro | 603 | 60 | 52 | { Śākya attained Buddhohood in the 16th year of this reign. Śākya died and the first convocation was held in the 8th year of this reign. The former event constitutes the Buddhistical epoch. |
| Ajātasattu | 551 | 9 | 32 | |
| | | A. B. | | |
| Udayibhaddako .. | 519 | 24 | 16 | { Collectively. |
| Anuraddhako ... } | 503 | 40 | 8 | |
| Muṇḍho ... } | | | | |
| Nāgalaṅko ... | 495 | 48 | 24 | |
| Susunāgo | 471 | 72 | 18 | { The second convocation held in the 10th of this reign. Collectively. Individually. |
| Kālasoko | 453 | 90 | 26 | |
| Nandoo | 425 | 115 | 22 | |
| Nandoo | 403 | 140 | 22 | |
| Chandagatto | 381 | 162 | 24 | { This monarch's inauguration took place in A. R. 218, four years after his accession which shows an anachronism in this table of ten years at his accession. The third convocation was held in the 17th year after his inauguration |
| Bindusāro | 347 | 196 | 28 | |
| Aśoko | 319 | 224 | 37 | |

² Bhilar Topes, p. 75. Lassen also proposes to give an extra 66 years to the Nandas, but he spoils the whole rectificatory process by limiting the remainder to 22 years.

General Cunningham, expresses himself aggrieved by two statements in my last paper in this Journal (5th July, 1862, vol. xi. p. 99). I should not have alluded to so personal a subject in this place, had not General Cunningham

authors usually assign to them. This then is the rectification I should propose to apply, making the accession of Nanda Mahāpadma in or about 425 B.C., and admitting an independent reign of 22 years more or less, which leaves nearly 78 years to be filled in by the joint rule of his nine sons. This with a possible interregnum, while Chāpakya was accomplishing the Brahmanic revolution, will bring the ac-

imported a certain degree of asperity into his reclamations, and coupled them with an insinuation of a design on my part to elevate another at his expense.

The first item is easily disposed of in my notice of Col. J. Abbott's coin of Epander (Note 2, p. 99) I associated it with the term of "a new king." As the name did not occur in any of the lists I was then in the act of quoting, the words merely amounted to a conventional expression, though indeed, as far as I was then aware, the coin itself was essentially unpublished, notwithstanding that its existence had been long known to Indian Numismatists (Col. Abbott himself, Col. Bush, etc.) before the coins themselves left Calcutta. I, individually, arrogated no merit in the bringing forward of this novelty, though I imagined it to be a unique specimen of a Bactrian sovereign previously unknown in Europe. However, it seems that Gen. Cunningham, had, in an obscure corner of the J. A. S. B. for 1860, devoted to miscellaneous notices—fairly and fully published, in India, the fact of his own possession of a similar piece. But in his attack upon me, he completely ignores the very qualifying incident, that my article was avowedly put forth as interrupted, and incomplete, and for the major part prepared two years previously, when I first had an opportunity of examining Col. Abbott's collection in November, 1859. Had I by hazard chanced to have seen General Cunningham's notice, other portions of it would have proved really valuable to me for the very enquiry I was then engaged upon, as furnishing an important illustration of the contemporaneous numismatic record of another Suzerain and Satrap, in the conjunction of the names of Antiochus and Agathocles. The second charge against me is eccentric in the extreme. It purports, by implication, that I designedly gave credit to Babu Rajendra Lal, a fellow-labourer in our own field of research, for a discovery General Cunningham claims for himself (the exceptional words made use of are—"has enabled Mr. Thomas," etc.) My inoffensive note, out of which all this jealousy has arisen, has furnished the groundwork for a very pretty quarrel and literary combat in India, in which I have happily escaped taking part—but which seems to me to have been energetically and efficiently conducted, to what may be hoped to be the end, by the Babu himself (vol. xxii. p. 439).

All I am called upon to explain is my wrongdoing, in publishing a passage so liable to misinterpretation, but truly, if it were worth while to revert back and examine the original note (vol. ix. p. 108, note 1,) it will at once be manifest that I was quoting from a single detached number of the J. A. S. B., without being aware of or at the moment capable of verifying, what had been published in previous numbers; hence, I was specially on my guard, and resorted to the general phrase of "who has been identified with Hushka," instead of saying by Babu Rajendra Lal, a reserve demanded for the very sufficient reason, that the article from which I drew my knowledge was so inexplicable in itself that I hardly knew whether *the* Mr. Bayley, cited elsewhere in the paper, was not the originator of the disputed identification. The entire difficulty, in either case—so far as I am concerned—arose from the too limited circulation in England of that excellent Journal of our fellow-society, the Asiatic Society of Bengal. A plea I shall individually be henceforth incompetent to avail myself of, as under the liberal arrangements now in force, as an honorary member I regularly receive their publications.

cession of Chandra Gupta to about B.C. 317-6, which would sufficiently accord with the statement of his being a *μεγακιστος* at the time of Alexander's invasion.

Whatever questions of traditions and imperfectly recorded testimonies may have complicated the right determination of the successional dates, a much more speculative enquiry remains, as to what position in the march of alphabetical developments, when tried by parallel local inscriptions—the legends on the coins of Krapanda would limit the period of their issue. There need be no possible reserve in avowing that the Indian Páli alphabet on this currency is far in advance of the formal lapidary writing of the Edicts of Aśoka, which range from about B.C. 250 to 232. I have, therefore, to seek to explain why the more matured characters should claim to date nearly a century prior to the palæography of the monumental tablets. It has been usual to assume that because these latter proclamations were the earliest authenticated inscriptions extant, that therefore their letters represented the primitive form of alphabetical writing of the entire continent of India, and hence that these phonetic signs had constituted the fountain head from whence all progress or improvements were derived, in short, that these letters had furnished the model, and therefore were to supply the ultimate test of the age of all and every description of local characters.

In accordance with this idea, James Prinsep, in 1838, framed a Palæographic table,¹ which it was supposed would suffice to determine by the mere gradational forms of characters, the date of any given inscription of whatever locality. The theory was primarily based upon the imperfect knowledge then newly attained, that Aśoka's edicts were engraved in one and the same alphabet, so to say, all over India; and the inference deduced was that the character in question embodied the every day writing of the nation at large, and hence that any divarication from, or advance beyond, these fixed literal forms necessarily involved a subsequent effort

¹ J. A. S. B. vii. pls. xiii, xiv., and Prinsep's *Essays*, vol. ii. pls. xxxviii, xxxix.

of more mature growth. This is an assumption I have long protested against;¹ while fully admitting the originality and merit of James Prinsep's conception, I have uniformly resisted its unconditional acceptance, because it was wanting in the essential allowances for local diversities of caligraphy, for the progressive stages connected with modes and materials of writing, and equally disregarded the limitations or expansions incident to the dialects and languages the characters were called upon to define.

It is by no means requisite to suppose, that the old Pāli character of the edicts was essentially a *sacred* alphabet, but it clearly constituted *the* alphabet of the early centre of the Buddhist faith; and, as such, the primitive scriptures mechanically retained that form of writing, with which its teachers and missionaries were most conversant, and which preferentially must have accompanied the spread of the creed of which they were the oracles and exponents. If we are to give the most scanty credence to the indigenous legends reproduced in the Sanskrit and Tibetan texts;² there were in Śākya's youth already many dissimilar alphabets current in India. This statement would indirectly support the idea that Aśoka's edicts emanated from one Palace copy, tinctured possibly with the ideas, phraseology, dialect, and form of writing accepted at Court; but modified in these several details, in the spread and promulgation, as each of the independent schools already located in different parts of the country, felt concessions to be necessary to the vernacular speech or other local influences, by which they themselves had already become affected.

These lapidary records usually sculptured out of range of human vision, so far as facile legibility was implied, were seemingly intended to be published and proclaimed *circa voce* to the people, under the adventitious sanctity of proximity to the monuments on whose surfaces they were perpetuated,

¹ J. A. S. B. vol. xxiv (1855) p. 21. Prinsep's Essays, ii. p. 41. et seq.

² Csoma de Kőrös, *As. Res.* xx. 290. Among the rest are mentioned *Yavana* and *Hūna*, *Lalitā Vistara* (Tibetan version) M. Foucaux, Paris, 1847, pp. 122, 123. Rajendra Lal Mitra (Sanskrit text) *Bibliotheca Indica*, Calcutta, 1863, p. 143 et seq. The Sanskrit version omits the *Yavana*.

while the text itself may, perchance, have been designed to be interpreted and explained¹ to the multitude somewhat after the manner of the old Hebrew ritual,² which laboured to convey so much of the essence of the Law to the vulgar at large.

If these Eastern monumental inscriptions were not within legible distance, they can scarcely have been engraved with the simple design of being intelligible to the masses, unaided by the gloss of the authorized expounder. At the same time there is no reason whatever to doubt that the alphabet itself represented the primæval scheme of writing invented in situ, and that it constituted the prototype of all the improved as well as degraded alphabets of the continent; as such, it would continue fully intelligible either to the dwellers in remote parts, or to the more highly instructed races, who were habituated to the use of advanced types of the same scheme of writing. And, as with the letters, so with the dialects, which must far more have needed illustration and explanation. It can scarcely be imagined that the vernacular speech at Dhauli and Ganjam was identical with, or even similar to, that at Gīrnār and Peshāwur, at which last site, the larger concession was made of a transcript into a new character, and a more Sanskritic version, the letters of which were clearly of local usage, constituting the *Yavanāni lipi* of Pāṇini's Taxila experience; and which were so readily adopted by the Greeks, in parallel association with their own classic alphabet, on the sequence of Bactrian coins, whose early issues were nearly contemporaneous with the endorsement of Aśoka's Edicts.

The more immediate point to be determined, however, is whether the practical method of writing at the very focus of Brahmanic vigour, on the Jumna, in B.C. 325, was not far in

¹ *Princp.* J.A.S.B. vii. 444. "My desire is that in this very manner, these (ordinances) shall be pronounced aloud by the persons appointed to the stupa," pp. 445, 447. "This edict is to be read," etc. 462 *Burnouf*. "Lotus de la bonne loi," pp. 672-3, 680. "Sur ce Stūpa a été promulguée la règle morale . . . Aussi est-ce là ce qui doit être proclamé par le gardien du Stūpa qui ne regardera rien autre chose (ou bien, aussi cet édit a dû être exprimé au moyen du *Prākṛita* et non dans un autre idiome)."

² *Nebemah* viii. 7, 8, 9-13.

advance of any coeval development of the undisturbed indigenous alphabet of Behâr? To this question there can be but one answer. The fixity of the Mâgadhî, or Indian Pâli character is proved centuries after this date, in the monumental records at Bhilaa.¹ The Mâgadhî, of whatever dialect, was satisfied, like the Hindi of modern days, with disjointed consonants, altogether ignoring vocalic elisions; but from the moment the local alphabet was called upon to satisfy the precision of Sanskrit grammar, it had, in that unexpected mission, to submit to the complication of compound consonants, and was therefore, in the very compromise, rendered liable to modifications and mutations of normal forms altogether un contemplated in its own primary and admirably simple scheme.

The parallel action of the Sanskrit element on the concurrent alphabet of Semitic derivation, variously entitled the Arian, or Bactro-Pâli, exemplifies as lucidly in the internal mechanism, the progressive changes from the fixed letters of the Kapurdigiri² inscription, and the unpretentious legends on the early Indo-Greek coins³ to the marked contrast exhibited in the advanced literal combinations of the Taxila Copper-plate,⁴ or the composite double-letters of the mint legends of the Indo-Scythians.⁵

If the demands of a higher linguistic structure were liable to affect the formation of letters, a more directly caligraphic query remains, as to what influence the concurrent Official system of writing exercised upon the local alphabet. The Semitic character which was seemingly learnt and acquired by the Aryans, on their passage through the dependencies of Ariana, would appear to have been associated and identified with their southern migration along the base of the Himalaya, and to a certain extent to have been domesticated with

¹ Bhilaa Topes. In one hundred and ninety-six inscriptions, there occur only "three" examples of "compound letters," p. 268.

² J.R.A.S., Prof. H. H. Wilson's *Rock Inscriptions*, xii. 153.

³ *Ariana Antiqua*, 239 et seq. Prinsep's *Essays*, ii. 182 et seq. *Numismatic Chronicle* (1864), vol. iv. 196.

⁴ Professor Dowson's Article *J.R.A.S.*, xi. p. 223.

⁵ *J.R.A.S.*, xi. 238, etc.

them in their new home in Brahmavartta, and from thence to have extended downwards as far as Mathurá, below which all trace of it becomes lost.¹

It is clear that this graphic system to a great extent superseded the indigenous scheme of letters in the Punjab, though for no very extended period, as it was speedily superseded and eclipsed by the more congruous character of Indian growth.² But, as the Bactrian or *Yavanant lipi* is found by the evidence of its linear construction to have owed much to the southern theory of classification and definition of letters, in its own advance from the sixteen figures of the Phœnicæo-Babylonian, and its further progress towards the full alphabet which Aryan languages demanded from the altogether inadequate normal Semitic elements; so, in the very coins under review, can be traced the effect of one system of writing upon the other—the action and reaction of concurrent palæo-

¹ I recapitulate the leading inscriptions in this alphabet—1. Hidda (No. 13), near Jalilabad, in Afghanistan. An earthen jar, having an Arian inscription, written in ink, and dated in the year 8. *Ariana Antiqua*, p. 111, and plate, p. 262. 2. A steatite vase from Bimaran (Jalilabad), with a legend scratched on its surface, undated. *Ariana Antiqua*, pp. 52, 70, pl. ii fig. 1; Prinsep's Essays, i. 107, pl. vi. 3. 11. Wirdak (30 miles W. of Kabul) Brass Vase, now in the Indian Museum, inscribed with dotted letters, dated in the year 51, and recording the name of Hushka, the OOHPKI of the coins, see *Ariana Antiqua*, p. 118; Prinsep, . 104, pl. v.; *Journ. As. Soc. Bengal*, No. iv. of 1861, *Journ. Royal As. Soc.*, xx. 37. 4. The Taxila Plate, dated 78, bears the name of Moga, identified with the Moa of the coins, *Nunn. Chron.*, vol. xix. *Bactria List*, No. xiv. 5. Munkhala Stone Slab (now in the Bibliothèque Impériale, Paris), dated in the year 18, contains the designation of Kanishka. Prinsep's Essays, i. pl. ix, *Journ. Royal As. Soc.*, xi. 251. From the same site was obtained the Brass Cylinder now in the British Museum, Prinsep, pl. vi. To these may be added two inscriptions from the Yusufzai country, one dated 6, *Journ. As. Soc. Bengal*, 1864, p. 705, Prinsep, i. pl. ix, and the bi-lingual inscription at Kegera (Arian and Indo-Pál.), Prinsep, . 159, pl. ix, as well as the Mathura Inscription in Indian Pál letters, but dated in Bactrian figures, *Journ. As. Soc. Bengal*, 1861, p. 427, and *Coins*, Prinsep's Essays, ii. 197.

² A collateral branch of this enquiry suggests itself in the course and survival of the Greek alphabet in India, which followed the conquering progress of the Bactrian Hellenes, as the affiliated alphabet of *Soma* the origin attended the domestication of the Aryan races. The necessary incidents differed, however, in this respect, that the classical language was naturally less completely demised, and was retained more exclusively by the ruling classes, though its literal system was preserved in a degraded form, possibly even beyond the duration of the currency of the Arian character. Its geographical extension may be defined as nearly parallel to that of the Arian writing towards the Gangegetic provinces, while it penetrated in a comparatively independent manner to the Western coast. It is singular that there is no trace of any solitary inscription in the Greek language in all India, but in its numismatic form it remained the leading vehicle of official record, with a subsidiary vernacular translation, during more than two centuries under Greek and Scythian

graphica. I need not press the important point of the difference between the stiff forms of lapidary epigraphy, as opposed to the pen and ink writing of every day life; nor need I further advert to any of the minor arguments supporting the theory I advocate, as with the above and other good and valid reasons the case might be admitted as proven; but that I desire to answer, by anticipation, objections which may chance to be taken by those who still consent servilely to follow Prinsep's original suggestion—a bright thought, which I, among the most devoted of his admirers, regret he was not spared to improve and mature.

The deduction which archæological data thus indicate, is

auspices. It was similarly employed in conjunction with Arian legends by the Rudphæe Indo-Scythians (*Ariana Antiqua*, pl. x. figs. 6, *et seq.*), while the Kanerki Horde used it exclusively in the definition of their barbarous titles. (*Ariana Antiqua*, pls. xii. xiii. and xiv.) The gold coins of the latter merge into those of the Guptas, but the degraded Greek gives place to a cultivated type of Indian Pali letters (Prinsep's *Essays*, i. 227, &c.), while the Gupta silver money, based upon the standard of the Western currencies of the Sâh Kings, retains, in scarcely legible outlines, the titular PAO NANO PAO, of Kanerki origination (*J. R. A. S.* xii p. 11). At a period much antecedent to the spread of the Guptas, which is variously assigned to the second, third, or even fourth centuries (Lassen, *Ind. Alt.*, p. ii 752, etc.; Prinsep's *Essays*, i. 276) A.D., a very imperfect form of Greek had found its way into Guzerât, where it figures on the obverse of the coins of these Sâh kings of Surashtra, in association with an elegant and highly-finished Sanskrit legend on the reverse. The nearest approach to coins, any of these debased imitations of Greek admit of, is furnished by a coin of Rudra Sâh, the son of Jiva Dama (*J. R. A. S.* xii. 42, *Ibid.*, ii 88, Lassen, *Ind. Alt.*, ii. 794), where something like the name of Dionysius (ΔΙΟΝΥΣΙΟΥ, *etc.*) may be seen.—*Num. Chron.*, vol. iii., N. S., p. 233.

Since the preceding sheet has been set up in type, I have seen Mr. Newton's paper on the Sâh Kings (Bombay Br. R. A. S., 10 Sept., 1863). The ample materials supplied to the author by native friends on the spot have enabled him to add three new names to the list of fifteen previously known. As Mr. Newton comments on my article in this Journal (vol. xii. 1848), I may have occasion to review the whole question hereafter; but I may mention that Mr. Newton makes the complete series of the eighteen kings date from 102 to 294, or 192 years in all, which he assigns to the era of Vikramāditya, thus fixing the epoch of the dynasty at from "A.D. 30 or 40 to A.D. 240, 250." In my last examination of this subject (*Journal Asiatique*, Octobre, 1863) I came to the conclusion that the limited numbers I had observed on the coins ranged from 187 to 296, which numbers, tested by the Seleucidan era to which I gave, and continue to give, the preference, corresponded with B.C. 125 to B.C. 22. In still adhering to this cycle, I must explain, that I reject all Mr. Newton's dates between 102 and 170, as I distrust the reading of the early numbers and observe that the author continues to interpret N as 7 instead of the established 70. On the other hand, I am quite prepared to accept the improved reading of *Vareha prathamam*, "in the first year," on the coins of *Iwara datta*; but I interpret the record to mean, "the first year" of his election by Republican suffrage to an office of determinate tenure—and not to the first year of absolute sovereignty, a distinction the modesty of his titles would alone imply, if the absence of a patronymic does not also justify the inference that he was one of the earliest representatives thus elevated.

confirmed and illustrated, in the most apposite manner, both by the testimony of early tradition and mediæval evidence. Hiuen T'sang, in A.D. 648, speaking of the legends preserved in the land regarding the origin and spread of Pali writing, expresses himself as follows:—Les caractères de l'écriture ont été inventés par le dieu *Fan*, et, depuis l'origine, leur forme s'est transmise de siècle en siècle. Elle se compose de quarante-sept signes, qui s'assemblent et se combinent suivant l'objet ou la chose qu'on veut exprimer. Elle s'est répandue et s'est divisée en diverses branches. Sa source, s'étant élargie par degrés, elle s'est accommodée aux usages des pays et aux besoins des hommes, et n'a éprouvé que de légères modifications. En général, elle ne s'est pas sensiblement écartée de son origine. C'est surtout dans l'Inde centrale qu'elle est nette et correcte.”—*Hiouen-T'sang*, Mémoires, etc., vol. i. p. 72, (Paris 1857).

Al Bîrûnî, residing in A.D. 1031 among the people whose customs he was describing, gives a full list of the varieties of writing then current, and particularly specifies, at the head of the list, the form in use from Kashmîr to Benâres, at that time the joint representatives of the learning of the country.”

¹ I annex M. Reinaud's translation of the passage in question. As we have no MS. of Al Bîrûnî's *Tarikh-i-Hind* in England, whereby to check or improve the French version, I allow it to stand without comment.—“On compte plusieurs écritures dans l'Inde. La plus répandue est celle qui porte le nom de *siddha-matraca* (سد ماترك) ou substance parfaite; elle est usitée dans le Cachemire et à Benâres, qui sont maintenant les deux principaux foyers scientifiques du pays. On se sert également de cette écriture dans le Mathya-Deça, appelé aussi du nom d' Aryavartha. Dans le Malva, on fait usage d'une écriture appelée *nagari* (ناگر): celle-ci est disposée de la même manière que la première, mais les formes en sont différentes. Une troisième écriture, nommée *ardha-nagari* (ارد ناگر), c'est-à-dire à moitié nagari, et qui participe des deux premières, est usitée dans le Bhatia (بھاتيه) et dans une partie du Sind. Parmi les autres écritures, on peut citer le *malchary* (ملغارى), usité dans Malacatcheva (ملمشوا), au midi du Sind, près de la côte; le *besandiba* (بسنديبا), employé à Bahmanava, ville appelée aussi Mansoura; le *karnâta* (کرناٹ), usité dans le Karnate, pays qui donne naissance aux personnes appelées, dans les armées, du nom de Kannara (کنرد); l'*andri*, employé dans l'Andra-Deça ou pays d'Andra (اندر ديش); le *dravidi*, usité dans le Dravida ou Dravira, le Jari, dans le Jar-Deça ou pays de Jari, le *gnara* (گنارى), dans le Purab-Deça (پورب ديش) ou région orientale (le Bengale), et le *bikchaka* (بيکشک) dans le Oudan-

The purely geographical question of sites of discovery of coins is altogether beyond the range of any speculative theories; but it is singular that the centre around which the limited number of more observant collectors would, under that test,¹ circumscribe the extreme radius of the currency of Krananda's money—results in pronouncing the chief seat of issue to have been in or very near to the sacred cradle of Brahmanism, "between the two divine rivers."²

Sir Proby T. Cautley first brought these coins prominently into notice, on their casual discovery during his excavation of the submerged city of Behat on the Jumna, where, seventeen feet below the modern surface of the sub-Himalayan detritus, in sinking wells for the foundations of the works of the Doáb canal, he came upon the undisturbed deposits of the past, whose period of inhumation was geologically supposed to be told by the number of feet of sand, etc., which natural causes had added to the previous level of the country.³

There is a seeming inconsistency in admitting any notion

Pourahana (اورہنا). La dernière écriture est celle dont se servent les bouddhistes (البُد).⁴ M. Reinaud, *Mémoire sur l'Inde*, p. 298; MS. No. 584, Folio, 39 verso.

¹ General Cunningham, one of our earliest and most persevering coin collectors, speaks of this money "as both of silver and copper, found chiefly between the Indus and the Jumna" (*Bhilsa Topes*, p. 334). Mr. E. C. Bayley, another very devoted numismatist, concurs with me in placing their *nidus* further to the eastward (*Prinsep's Essays*, i p. 204). The Stacy collection produced only 23 specimens of the class, out of a total of between six and seven thousand coins brought together, during many years of patient labour and personal search, over a large range of country (*J.A.S.B.* xxvii. p. 255), while the immense accumulations of Masson in Afghanistan, did not contribute a single example (*Ariana Antiqua*, p. 415). A number of Krananda's coins are engraved in pl. xxxii. vol. vii. (1838), *J.A.S. Bengal* (p. 1051), but their places of discovery are not noted.

² *Manu* ii. 17. "The tract, fashioned by the gods, which lies between the two divine rivers, Sarasvati and Drishadvati, is called Brahmaparvata. The usage relating to castes and mixed castes, which has been traditionally received in that country, is called the pure usage. The country of Kurukshetra (in the region of modern Delhi), and of the Matsyas (on the Jumna), Panchalas (in the vicinity of modern Kanauj), and Śurasenas (in the district of Mathurā), which adjoins Brahmaparvata, is the land of Brahmarshis (divine Rishis)." "The tract situated between the Himavat and the Vindhya ranges to the east of Vināsana and to the west of Prayāga, is known as the Mādhyadeśa (central region). The wise know as Aryāvartā, the country which lies between the same two ranges, and extends from the eastern to the western ocean."—Mun, *Sanskrit Texts*, ii. 147. For the comparative geography of this tract, see *J. A. S. Bengal*, ii. 106-7, Major Colvin, vii. 752. Mr. M. J. Edgeworth, ix. 688; Lt. Baker, xii. 297; Major Mackenzie; and Elliot's *Glossary of Indian Terms*, article Bhuttāna, p. 78.

³ *J.A.S.B.* iii. 222. *Prinsep's Essays*, i. p. 76.

of so northern a seat for Kṛaṇanda's metropolis, when he is confessed to have been monarch of all the Gangetic Valley, holding a capital at Palibothra; but the numismatic records probably concentrated themselves near the site of their original issue, and the more frequent discovery of these coins higher up the Indian Mesopotamia, would only prove that material and commercial wealth had the advantage in this part of the king's dominions over the provinces more towards the Delta.

In my own individual experience, *no* ancient coins, in the general sense, are found below Allahabád. Benáres occasionally contributes a transported specimen, but the limits of search, approved by my own Native coin collectors starting from *our* head quarters, at Sháhárnpore or Dehli, gradually ceased to extend below Mathurá. On the other hand, we know how singularly the surviving representatives¹ of the earlier Greek currencies localized themselves in Behgrám, and how prolific the soil of the Punjáb still continues to be in the numismatic remains of the more settled Indo-Bactrian and Indo-Scythic kings.

These archæological facts, whatever their first aspect might indicate, by no means show that Kṛaṇanda was not king of Magadha, but they certainly prove that whatever of social culture and civilization may be held to be associated with a full and complete system of monetary exchanges pertained to a limited area of comparatively unprolific soil, bordering on a desert on the one hand, and shut in by the Himalayas on the other; while the richer country of the lower Ganges, for whatever reason, remained unsupplied with a commensurate metallic circulation. And it is a point worthy of remark, that *the* tract which the Vedic Aryans chose as their new home should, through so many ages, and under so many disadvantages, have retained its pre-eminence till ocean navigation and English commerce gradually elevated Calcutta to the inheritance of the Imperialism of Moghul Dehli.

It is more difficult to prove directly from existing numis-

¹ Masson, J A S B, in. 153. Prinsep's Essays, i. 81.

matic data the amplitude of the currencies of Krapanda; but any deficiency in this respect might be accounted for by the facts just cited, that the people of the more southern portions of his dominions either did not largely employ coined money, or that they were content to use it in the old form of specific weights of crudely-fashioned metal, even as the populations of the peninsula adhered to a like custom for so many ages after the higher class of mintages had secured a permanent footing in the northern and eastern sections of Hindustán. One of the nine Nandas is stated by the Maháwanso to have been designated *Dhana Nanda*, or the rich Nanda; though the adjective is interpreted by the Ceylon translator in the optional, but not necessarily correct, sense of "avaricious." Wilford, also, citing the Sanskrit authorities, gives us an imposing account of Nanda's wealth,¹ which, though greatly exaggerated and probably only in the lesser degree consisting of absolute coin, must have been very complete in the technic details of the Mint issues and abundant in quantity, before the Brahman Chánakya could have turned it to his purpose, in debasing the king's money, by forging new dies and re-issuing metal reduced to one-eighth of the true standard—in order to contribute towards the funds needful to secure the ruin of the Nandas and the final elevation of Chandra Gupta.² It may be sufficient to remark in this place, that the extant coinage of Krapanda is seemingly sufficient to justify the inference of his great wealth and extended dominions.³ The

¹ Wilford (As. Res. v. 242) quotes a Pauránik account of Nanda's treasures, which are fabulously rated at "1,584,000,000 pounds sterling in gold coin alone; the value of the silver and copper coin, and jewels, exceeded all calculation; and his army consisted of 100,000,000 men."

² "Opening the door (of Nanda's palace) with the utmost secrecy, and escaping with the prince out of that passage, they fled to the wilderness of Wijnghá. While dwelling there, with the view of raising resources, he converted (by receiving) each kahápana into eight, and amassed eighty kótis of kahápaná. Having buried this treasure, he commenced to search for a second individual entitled (by birth) to be raised to sovereign power, and met with the aforesaid prince of the Móriyan dynasty, called Chandagutto."—Maháwanso xl.

³ It is a curious fact, in connection with this enquiry, that no single coin of Chandra Gupta, Vindusára, or Asoka, has as yet been discovered; it is possible that the ample issues of Krapanda sufficed for the wants of the provinces, for which they were originally designed, during the succeeding three reigns, while the limited demand for coined money continued in the south; and in Asoka's time Greek currencies came opportunely to supply all northern demands.

minor arrangement and distribution of the subdivisional copper pieces would alone imply a largely diffused and comprehensive scheme of Mint administration, and its adaptation to the circumstances of the community is singularly exemplified in the incident that the copper currency appeals, in its isolated Indian Pāli legend, to the limited intelligence of the *indigènes*, while the duplicate legend of the governing classes, in Semitic characters, is reserved for the more imposing silver money.¹

I have still to describe the coins themselves, to explain the legends on their surfaces, and to seek to trace the origin and purport of the numerous symbols they have preserved for modern investigation.



SILVER.—Weight 29·0 grains. BRITISH MUSEUM (from the collection of James Prinsep).

Obverse.—The central figure represents the conventional form of the sacred deer of the Buddhists. (1) The horns are fancifully curved, and the tail is imitated from that of the Himalayan *Yak*; an appendage which, in its material use and pictorial embodiment, was so early accepted as a distinctive type of royalty. In attendance on this symbolic animal is a lightly-draped female (2), who holds aloft a lotus (3). The monogram Γ (4) completes the emblems on the field, but the lotus is repeated at the commencement of the legend.²

Legend, in Indian Pāli, transcribed into modern Sanskrit characters:—

राजः कण्ठदस अमोघ भ्रतस महारजस

Rajnah Kraṇandasa Amogha Bhratasa, Maharajasa.

¹ In Akbar's reign, gold was coined in four cities only, silver in fourteen, and copper in no less than forty-two. —*Kyū-i-Akbari*, i. 36.

² On some coins the lotus is inserted in the field below the body of the stag (J. A. S. B. vii. plate xxxii. fig. 4). On other specimens the letter Δ = *V* [*Vādra* *V*] occupies the vacant space.

the larger amount of Sanskrit carried by the Semitic alphabet had very early secured within its Eastern adaptive reconstruction a phonetic equivalent of the much required suffixed *r*.

As the *u* in its modern course, in India, changed its original configuration, the attached *r*, as far as monumental records suffice to prove, followed an equally eccentric caligraphic tendency in reversing this earliest borrowed model, an arrangement which has survived from the date of the inscriptions and coins of the Śāh kings on the Western coast and those of the sequent Guptas in Northern India to the current Sanskrit ॠ and the Bengali ৠ.

Another result of mutual influences is strikingly exemplified in a second instance of appropriation in these legends, where the Bactrian alphabet, to supply its own deficiencies, adopts the Indian Pāli ॡ = *jh*, to do duty for the more complete compound ॡ_h *jn* of the sister Palæography;¹ as the Bactrian writing did not so easily admit of conjunctions of consonants it contented itself with the aspirate already in local use.

The simple letters of the Pāli exergues of these mintages vary in the form of one and the same alphabetic symbol to an extent altogether incompatible with any possible hypothesis of mere epochal Palæographic advance. Here, on a concurrent series of coins—confined in point of time to the issue of a single reign, or tested by the localities of discovery closely limited in geographical range—are to be found letters of identical phonetic power, whose expression, on the various specimens of the general circulation, departs from any given model to a degree it would have required many centuries to have produced in more isolated provincial alphabets; while, on the other part, Asoka's Rock and Pillar Inscriptions, however much they may have been modified in dialect or phraseology, follow one uniform law of literal formation, so to say, over all India.² As has

¹ Asoka's Pāli Inscriptions vary the form as *Rāṇa*, *Raṇa*, *Lāṇa*; while the Bactrian Transcript gives *Raṇa* and *Raya*, as in the Taxila Plates. J. R. A. S. vol. 155, pp. 222.

² The Girnar Inscription has a far greater number of compound consonants than the more recent texts, but the simple letters out of which these combinations are formed follow the usual combination. It is curious to trace in these normal ligatures the exact method adopted for effecting the conjunction of consonants, and the disregard shown for the position of the leading letter of the

been already shown, there were sufficient reasons for this individualization, without at all trenching upon the independent progress of other modes of writing of anterior development. The present suite of coins fully demonstrates the action of the Semitic system upon the local character of Northern Hindustán; if the former, as there is valid ground to suppose, was already extensively domesticated in India prior to Pálini's time and *before* the advent of Sákya Muni, a very large margin, reckoning by centuries, may be conceded for the first date of its reception and gradual incorporation into the literature and grammar of the land, while the comparatively unpenetrated South contented itself with the old form of speech and its own corresponding ample means of expression.

To revert, however, to the Páli letters. The र in Raja is sometimes shaped like the lapidary I and in other instances follows the Western type J . The अ , in the same word, is represented on one specimen as E on another as z . The *anuswara* of the अ is occasionally, as in modern writing, placed above the I in other cases it is inserted between the forward lines of the leading consonants. The bodies of the अ 's vary from the square II to the rounded U and even to the pointed form N . The अ 's and न 's differ perceptibly in their respective outlines, and scarcely any two numismatic specimens give the figure of the अ alike.

Of the ten or twelve separate devices which cover the conjoined surfaces of Kṛaṇanda's coins, no single one can be denied significance among the received exoteric symbolization of the imperfect Buddhism of 325 B.C. Many of these signs were undoubtedly adopted, in later times, as distinctive emblems of particular schisms from the early creed; but the collection and association of so many crude types on the royal money can scarcely be supposed to refer to any temporising conciliation of sectarian severances at a period when Buddhism was in its first stage of development from the home worship to

compound, which was at times placed *below* the sequent character, and at times in its now universally recognised place, *above* the following letter. As, for instance, in *Bdmāya* ॐ (Tablet viii. 3), *Magavyā* ॐ (viii. 2), Dhauri ॐ ॐ

which it was so largely indebted.¹ It will be more rational to accept the entire series of symbols, so elaborately combined, as the prototypes of local thought and superstitious idealism, and to concede to religions, as to letters, a necessary growth and a progress more or less speedy as competition or stagnation might chance to dictate. Under this test I will pass in casual review the several items which contribute to the seemingly anomalous conjunction, reserving the more detailed illustration for the extracts embodied in the foot-notes.

(1). The central and most prominent object on the obverse consists of a deer, an animal which may not have been directly worshipped in India, but which, in very remote ages, had clearly been invested with some secondary sanctity; the Deer Park of the Immortal,² the sectarian symbol of a leading division of the creed,³ and the authoritative device for the seals of the priesthood,⁴ each in their degree establish the existence of a primitive reverence for this consecutively recurring type.

(2). The female attendant in front of the stag, whether in-

¹ The association of these symbols with a somewhat advanced phase of Buddhism is shown in the retention of the deer, the Bodhi-tree, the Stupa, and the serpent, which is placed perpendicularly on some specimens, on the reverse of a coin, the obverse of which displays the standing figure of Buddha himself, having the lotus and the word *Bhagavata*, his special designation, in the marginal legend. — Prinsep's Essays, i. pl. vii fig. 4. J. A. S. Bengal, iii. pl. xiv fig. 4.

² Foe koe ki, cap. xxxiv. Hiouen Tsang, i. p. 364. J. A. S. B. vol. xxi. p. xcvi.

³ Csoma Körösi remarks — The different systems of Buddhism derived from India, and known now to the Tibetians, are the following four — 1. *Vaishakhika* 2. *Sautrantika* 3. *Jogachdrya* 4. *Madhyamika*

The first consists of four principal classes with its subdivisions. They originated with Shakyas's four disciples, who are called in Sanskrit, Rahula, Kashyapa, Upali, and Katiyana. 1. Rahula, the son of Shakyas. His followers were divided into four sects. The distinctive mark of this class was an *utpala padma* (water-lily) jewel, and tree leaf put together in the form of a nosegay. 2. Kashyapa, of the brahman cast. His followers were divided into six sects. They were called the "great community". They carried a shell or conch as a distinctive mark of their school. 3. Upali, of the Sudra tribe. His followers were divided into three sects. They carried a *sartaka* flower (No. 10 of the Jaina list *infra*) as a mark of their school. They were styled "the class which is honoured by many". 4. Katiyana, of the Vaisya tribe. His followers were divided into three sects. They had on their garb the figure of a wheel, as the distinctive mark of their school. They were styled "the class that have a fixed habitation." — J. A. S. B. vii. (1838) p. 143.

⁴ J. A. S. B. v. (1835) p. 625. As. Res. ix. 86. "A man of the religious order must have on his seal or stamp a circle with two deer on opposite sides, and below the name of the founder of the Vihara. A layman may have either a full length human figure or a head cut on his signet." — Dulya.

tended to represent priestess, *Bhikshuni*, or more probably the professional performer attached to the ceremonial of national worship, is outlined somewhat conventionally after the chosen model of India's daughters.

"There in the fane, a beauteous creature stands,
The first best work of the Creator's hands;
Whose slender limbs inadequately bear
A full-orbed bosom," etc. *Megha-dûta*, v. 647.¹

The figure in question, though otherwise subordinate among the leading symbols, is of importance in the history of the coins themselves—in furnishing the crowning demonstration of their independent art treatment. There is no semblance in this engraving of any Greek teaching, and no possible trace of secondary copying or crude imitation of classic designs. The local artist is declared, in all his originality, in the ideal composition and mechanical rendering of the form, even to the massive anklets, which to European eyes so disfigure the general outline.

(3.) Like other favoured localities, whereself-growth presented so marked a form of floral perfection as the lotus, India's children early learnt to associate with the adoration of nature itself one of its most attractive earthly types. Hence "the flower of the waters" continued here, as elsewhere, to emblemize the still received device of many more advanced and intellectual systems of belief. As such, it is found as a standard adjunct in most of the external combinations either of Buddhists or Brahmans, more peculiarly belonging to the former in the first instance, and more directly identified with the Southern spread of their religion, it entered largely into the details of the imagery of the originally imported but speedily localized faith grounded upon Vedic rituals. Hence the symbolic flower is possibly repeated on these coins, as a mere sequence of a preconceived ideal,² while

¹ Lieut Massey, in his admirable drawing of the *Nâchâi* (pl. xiv. Bhilsa Topes), has vividly reproduced the *beau idéal* of the Buddhist sculptor, from the Sanchi gateway. The general design of the figure is in singular accord with the tenor of the poet's description. My own artist's drawing has suffered sadly from imperfect engraving.

² Ante, note, p. 476. J. A. S. B. i. 2. Dulva, 426, "Padma-chenpo." As. Res. xx. 300, "A white lotus or the true religion." See also p. 544, and Transactions, R. A. S. iii. 107.

Jainas¹ and Brahmins² in later times equally claimed the emblem in its religious sense as their own.

(4.) ☐ General Cunningham supposes that this is a symbol of the Sun,³ he does not, however, mention his authority for the attribution; I should prefer to look upon the figure as a more primitive definition of the Sacred Tree, which was subjected to so many changes of artistic representation. If we may infer that the religion had, at this period, attained so much of progressive development, as to recognise *other* Buddhas antecedent to Śākya Muni; this severe outline may chance to typify the traditional symbol of a predecessor; while Śākya's own emblem may be intentionally contrasted in the flourishing branches of the larger and more ornamental figure on the reverse.

(5.) The most prominent device on the reverse consists of the conventional outline of the sepulchral tumulus, named in the Pali *Tapha*⁴ तुफ (Sanskrit, *Stūpa*), from the root तप, to burn,⁵ which in its secondary and derivative sense, came to

¹ Symbols of the deified saints or *arhats* of the Jainas:—1, a Bull, 2, an Elephant, 3, a Horse, 4, an Ape; 5, a Curlew, 6, a Lotus, 7, a *Svanatka*, 8, the Moon, 9, Makara (a marine monster), 10, a *Srivata* (a four-petalled flower), 11, a Rhinoceros, 12, a Buffalo, 13, a Hour, 14, a Falcon, 15, a Thunderbolt; 16, an Antelope, 17, a Goat, 18, *Nandavasta*—an arabesque device formed by a continuous prolongation and parallel repetition of the lines of the original Swastika; 19, a Jar, 20, a Tortoise, 22, a Conch, 23, a Serpent, 24, a Lion.—Colbrooke, A. R. x. 304.

² The gems of Kaveri, the Indian Pictus, are thus described by Wilson:—“The Padma, Mahapadma, Sankha, Makara, Kachhapa, Makunda, Nanda, Nila, and Khava, are the nine *Nidhis*.”

Some of the words bear the meanings of precious or holy things, thus, Padma is the lotus, Sankha the shell or conch. Again, some of them imply large numbers, thus Padma is 10,000 millions, and Mahapadma is 100,000 millions, etc. but all of them are not received in either the one or the other acceptation. We may translate almost all into things, thus, a lotus, a large lotus, a shell, a certain fish, a tortoise, a crest, a mathematical figure used by the Jainas (*Nandavasta*, No. 18 of Jung's list—*Nidhi* refers only to conch, and Khava, the ninth, means a dwarf. Agreeably to the system of the Jainas the *Nidhis* are personified, and, upon certain occasions, as the worship of Lakshmi, the goddess of prosperity, etc., come in for a share of religious veneration. They have also their peculiar mantras or mystical verses. *Meghaduta*, verse 531, v l ii, note, p. 380. Wilson's Works. London, 1864.

³ Bhilsa I. p. 354.

⁴ So written on the Rock at Dhoul,—though the vernacular Books have Thupa, etc. The Sanskrit *Stūpa* is said by the *Sūtra* grammarians to be derived from the root स्तूप to heap, but the application of तप to तपस seems to negative this derivation.

⁵ Zend, *tap*, *tefnu*; Persian, تَفَنُّن; Latin, *tepo*, *tepidus*, etc., Italian, *Tafo*,

signify the locality of cremation and the resting place of the remains of the dead. The Greek and Latin etymologies followed a parallel law, in *τυφο*, *τύμβος*, and *uro* (*buro*, *πῦρ*), *bustum*, which from an original application to the locality of incineration, eventually came to designate the mound of earth heaped over the ashes. The practice of incremation and raising tumuli over the cinerary remains of the deceased, was clearly an established institution in Behár in Sákya's time, and in its theoretical growth probably carried with it a certain amount of veneration for the tombs of kings, heroes, or saints, though Buddha himself clearly did not contemplate the extraordinary extension and development the worship of relics was destined to reach in the case of his own mortal ashes; the singular competition for portions of which, possibly gave an adventitious impulse to the faith he had introduced. His dying instructions to Ánanda were, that his obsequies should be conducted as those of a Chakkavattí Raja, which he himself is reported to have defined, "they consume the body of a Chakkavattí rája; and for a Chakkavattí rája they build the *thupo* at a spot where four principal roads meet."¹ As the worship of relics advanced in popularity, the original sepulchral Stúpas were devoted to new uses, as receptacles of objects of pretended sanctity, and later, in point of time, were furnished with secret passages, etc., to aid more effectively in the deception of the vulgar.² A curious instance of the progress of ideas, in this respect, is furnished

Tufa, hence *Tuff*. M. Pictet has collected a long array of other Aryan coincidences in p. 506 et seq. *Les origines Indo-Européennes*.

The Latin *Tumulus* is asserted to be derived from *tumeo*, to swell; but it seems very like a corruption of the Greek *τύμβος*. The name of *Chaitya* is borrowed; and the *Doghops* is scarcely satisfactorily explained by *Dhātu gubbham* 'womb of a relic' (*Maháwanso*, p. 6). It would be more reasonable to derive the term from the root *दह्* "to burn;" Zend, *daj*, whence *dakhma*, "lieu de combustion."

Cf. also, داغ, دخم, and the Arabic دفن.

¹ Turnour, J.A.S.B. vii. p. 1005; Dulva, *As. Res.* xx. 312; Prinsep's *Essays*, note p. 167, vol. i. For other references to the subject of *Topes*, see *As. Res.* v. 132, x. 131; Elphinstone's *Cábul*, London, 1842, p. 108; Fergusson, J.R.A.S. viii. 30, and *Handbook of Architecture*, i. 8, *Maháwanso*, 107, et seq.; Masson, in *Ariana Antiqua*; Gen Cunningham "Bhilsa Topes," London, 1854, *Burnouf*, *Introd. Bud. Ind.*, Paris, 1844, pp. 355; ii. 672.

² Masson, in *Ariana Antiqua*, p. 118, etc.; *Maháwanso*, p. 211; Bombay Br. R.A.S. 1853, p. 11.

by the celebrated Manikyala Tope itself. The lowest level contained the cinerary urn of some early potentate or hierarch, sheltered under a massive stone slab; above this in the line of the centre of the Tope, at various elevations, were found two independant deposits,¹ evidently of subsequent insertion, or possibly following the rise and augmentation of the primary structure,² as we know that the more modern custom was to place the relics high up in the general mass,³ to secure ready access to them for the purposes of exhibition on stated occasions.⁴

(6.) The small Chhatra over the Stúpa scarcely demands independent notice, except in so far as to refer to this very early pictorial rendering of a symbol which Church and State equally affected, by the former the emblem was multiplied on the dome of the Topes in all imaginable directions,⁵ and in some cases adapted to a sevenfold superposition, a combination of much reputed efficacy,⁶ while in its course as an adjunct of royalty, and later as a regal device, it survived as the chosen heraldic symbol of the last Imperial House of Delhi.⁷

(7.) This temporarily most popular device with the early Buddhists and Indo-Scythians, like so many other cognate forms, seems to have had a home in India long before it was accepted as a symbol of *Dharma*. The original suggestion for the normal configuration may have taken its rise from an ideal combination of the Sun and the Moon, into the *Taurus*-like sign ☉—which appears in such frequent repetition on the representative weights of metal, that preceded and led up to actual coined money. The old design is clearly identical with the outline of the savage rendering of the idols of Jagganáth,⁸ and probably coincident in its origin. In its

¹ J. A. S. B. iii. p. 315, and vol. xiii. p. 699, also, Prinsep's Essays, i. pp 93, 101

² Maháwanso, p. 4, Wilson, Ariana Antiqua, p. 39

³ Maháwanso, pp. 107, 190. Bhilsa Topes, 322, et seq. Masson, in Ariana Antiqua, p. 60




⁴ Hiouen Tsiang, p. 216.

⁵ Bhilsa Topes, plate iii.

⁶ Low, Tr. As. Soc., ii. 99.

⁷ Coins, Maunsden Num. Orient., Prinsep's Essays, ii. N. T., p. 68.

⁸ Stevenson J. R. A. S., vii. 8, viii. 331, Sykes, J. R. A. S., vi. 450, Bhilsa Topes, plate xxiii. p. 359, and Cunningham, J. R. A. S., xii. p. 114. I do not concur in the fanciful derivation here suggested.

new form, with the duplicated and ornamental crescents, it may possibly have been associated with some modification of creed or subjected to dynastic adaptation, as the lunar races predominated over the local Sūrya Vanṣas. Burnouf speaks of this device as entitled *Vardhamānakaya*, and adds, "c'est là encore une sorte de diagramme mystique également familier aux Brahmanes et aux Buddhistes — son nom signifie 'le prospère.'"¹ It is a curious coincidence, and one that may invite further comparisons, that the cuneiform sign for Taurus ² should prove so similar in its general outline to the rounded form of the hitherto incomprehensible  of the Indian system. The dawning science of Astronomy, in its concurrent deceptive phase of Astrology, must readily have identified itself with kindred magic, in the interchange of signs and symbols, as in other mutual aids. One of the most singular of the primitive Buddhist designs, figured thus , occurs in a series of less-finished coins approximated in symbolic details to Krapanda's chosen Mint emblems, and is subsequently incorporated into the composite monograms of the Indo-Scythians,³ where it eventually takes the form of a line superposed by four balls,⁴ in which shape it still survives as the *Anurādhā* (अनुराधा), or the sign for the 17th Nakshatra⁵ of the Indian Zodiacal scheme.

(8.) The craft of serpent-charming in the East, probably from the very beginning, contributed a powerful adjunct towards securing the attention and exciting the astonishment of the vulgar—whether used as an accessory to the unpretentious contents of the juggler's wallet, or the more advanced mechanical appliances of professors of magic—who, among so many ancient nations progressively advanced the functions of their order from ocular deceptions to the delusion of men's minds and the framing of religions, of which

¹ Burnouf, p. 625. He refers also to Mahāvanso, chap. xi. p. 70, line 3. "(Vardhamānan) kumārīkaṇ."

² Rawlinson. J. R. A. S., vol. i., N. S., p. 224.

³ Prinsep's Essays, vol. i., pl. iii., figs. 10, etc.

⁴ Ibid, fig. 14. See also Ariana Antiqua, pl. xxii., figs. 155, 159, 160, 162.

⁵ As. Res. ii. 293. The device of the 17th lunar mansion is described as a "row of oblations."—Goldstucker's Dictionary.

they constituted themselves the Priests. India, which so early achieved a civilization purely its own, would appear, in the multitude of the living specimens of the reptile its soil encouraged, to have simultaneously affected the mass of its population with the instinctive dread and terror of the scriptural enemy of mankind—a fear which, in the savage stage, led to a sacrificial worship similar to that accorded to less perceptible evil spirits. Hence the dominance of the belief in Nagas¹ which came to be a household and state tradition, and which especially retained its præminence in the more local Buddhist faith.

(9). Trees with their grateful shade, and protection from the bright sun of the East, may well have been intuitively associated, from the earliest dawn of thought, with the gifts and minor attributes of a superior power. Such primitive reverence in India, on the part of the dwellers in the land, naturally ensured its own vitality among the subordinate adjuncts of localized creeds of higher pretensions—hence the ancient village tree of the more settled communities,² whose home was still within the reach and influence of the aboriginal Forest Tribes—came to be identified as a symbol of asceticism, and extended its meditative sanctity into the faith of Śākya Muni, who himself submitted to a complete course of contemplations under the recognized inspiratory shadows.³ The Buddhist Bodhi-tree

¹ Wilson's Works, ii. 23, iii. 45, 194, 317. Burnouf, *Lalitā Vistara*, Foucaux, pp. 11, 88. Huen Tsang, i. 94, ii. 323. "Two Kings of Dragons named Nanda and Upananda."

² "Then shall the ancient Tree, whose branches wear

The marks of village reverence and care." Megha Puta, 167.

[Wilson's Note]—A number of trees receive particular veneration from the Hindus: "as the Indian fig, the Holy fig-tree, the Myrobalan trees, etc. In most villages there is at least one of these, which is considered particularly sacred, and is carefully kept and watered by the villagers, is hung occasionally with garlands, and receives the *Pranam* or venerative inclination of the head, or even offerings and libations."—Wilson's Works, iv. 336.

Ward gives a list of seven Sacred Trees, independent of the *Tulasi* (तुलसी, *Ocymum sanctum*). Ward's *Hindus*, iii. 203-4.

So also, Quintus Curtius, "Deus pitant, quicquid colere coeperunt, arbores, maxime, quas violare cupita est" vi. 9, § 34.

In like manner *Chaitra* (चैत्र) originally implied "Any large tree held in peculiar sanctity," and the name was ultimately appropriated to the Buddhist Stupa, cf. See Wilson's *Glossary*, *sub* *roc*, and Burnouf, i. 318. See also Stevenson, *J. R. A. S.* vol. v. p. 192. Sykes, *ibid*, vol. vi. p. 452.

³ Turour, *J.A.S.B.* vii. 814.

was one only of the four already sacred shades, under which its most prominent teacher confessedly acquired perfection. With so authoritative a recommendation it is no marvel that the selected Ficus came to be universally typified amid the emblems of the reformed religion.

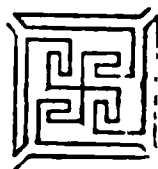
(10). The extensively spread symbol of the Swastika seems to have been held in scant respect by the Sanskrit speaking Aryans—as we find Pāṇini at an epoch anterior to Buddhas Nirvāṇa, citing it as a mark for cattle.¹ This practical use of the figure in the Punjāb need not, however, have interfered with its reverence among the indigenous races more to the eastward, who may have accepted it as an inheritance from earlier and more crude forms of belief, and incorporated it as one of the prominent emblems of Buddhism;² while Brahmanism in its growth and fusion with the superstitions of the land eventually welcomed it into its own formulary. As to the sign itself, it appears to be a mere ornamental advance upon the simple cross lines, which might have suggested itself amid any uninformed people, without being identified, in its first inception, with any very definite meaning, while it was singular enough in its outline to attract the attention of professors of magic and cabalistic rites. The direction of the additional tail lines is not fixed and uniform, though the figure on the coins represents the favoured outline, but at times the foot strokes are reversed and curved after the pattern in use in the western³ triple configuration. The symbol was early affected by the Greeks; it is found on pottery from Kamirus of the sixth century B.C., and with its duplicated lines it appears as the hieroglyph or prototype of the Labyrinth of Crete, on the coins of Cnossus, 500 to 450 B.C. In its in-

¹ Goldstücker, "Panini, his place in Sanskrit Literature," London, 1859, p. 59, "There is a rule of his (vi 3, 115) in which he informs us, that the owners of cattle were at his time in the habit of marking their beasts on the ears, in order to make them recognizable. Such signs, he says, were, for instance, a swastika, a ladle, a pearl," etc.

² The *Tao-ssu* or "Sectaries of the mystic cross are noticed by Fa-Hien (cap. xxii. xxiii.). Their doctrine is stated to have formed the ancient religion of Tibet, which prevailed until the general introduction of Buddhism in the ninth cent. A.D.

³ Num. Chron. N.S. vol. iv. the earliest Indian coinage, plate xi. Prinsep's *Essays*, pl. xi. fig. 26.

dependent Indian course, it was developed into the Nandivarta, which is figured thus



(11). I am unable to conjecture the intent or import of the singular emblem which appears below the Swastika. An earlier form of the device occurs on the introductory weight currency as but this outline suggests no more intelligible solution of its real import than the more advanced linear configuration. The design may possibly have emanated from some fortuitous combination of mystic signs of local origin, so many of which passed imperceptibly into the symbolizations of Buddhism. General Cunningham states that this device, or its modified form as seen on Krananda's coins, is found on the necklace of Buddhist symbols on one of the Sanchi gateways.¹

¹ Bhilsa Topes, p. 354, and plate xxxi, figs. 10, 11, and xxxii. fig. 6.

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ROYAL ASIATIC SOCIETY.

PROCEEDINGS OF THE FORTY-FIRST ANNIVERSARY MEETING OF THE SOCIETY.

Held on the 30th May, 1864.

THE RIGHT HON. VISCOUNT STRANGFORD,
PRESIDENT, IN THE CHAIR.

THE following Report of the Council was read by the Secretary :—

In submitting their annual Report to the General Meeting, the Council regret to state that several members have been lost to the Society by death and retirement since the last anniversary Meeting, and that the new admissions have not been proportionately numerous. In addition to one honorary and one corresponding member, seven resident and three non-resident members have been lost by death, and nine resident and six non-resident members have retired, whilst no more than eight resident and an equal number of non-resident members have joined the Society in the same period,* so that the losses exceeded the accessions by nine.

* *Elected.*—*Resident* : Sir John Low ; D. Mackinlay, Esq. ; W. Henty, Esq. ; E. Deutsch, Esq. ; C. Bruce, Esq. ; the Earl St. Maur ; C. J. D. Cole, Esq. ; Rev. B. B. Haigh, D.D. *Non-Resident* : M. H. Scott, Esq. ; Dr. A. J. Goldenblum ; Colonel A. B. Kemball ; Colonel F. J. Goldsmid ; Dr. F. Dini ; Count C. Marcolini ; Count M. Amari ; H. W. Dashwood, Esq.

Retirements.—*Resident* : T. Bazley, Esq., M.P. ; R. Clarke, Esq. ; W. G. Goodliffe, Esq. ; J. Hutt, Esq. ; M. Lewin, Esq. ; E. S. Poole, Esq. ; Lieut.-

Among the deceased members the Society has to lament the loss of the following distinguished names :

THE RIGHT HON. WILLIAM BINGHAM, LORD ASHBURTON, was the son of the well-known merchant prince Alexander Baring, who for many years represented the borough of Taunton, and was eventually raised to the peerage by Sir R. Peel. From the year 1826 till 1848, when on the death of his father he was summoned to the Upper House, Lord Ashburton was a member of the House of Commons, and a zealous supporter of Sir R. Peel, under whom he successively held the offices of a Secretary to the Board of Control, and of Paymaster of the Forces and Treasurer of the Navy. While as a practical philanthropist he was ever anxious to promote the social and moral improvement of the working classes, he possessed at the same time throughout his life a warm appreciation of everything relating to science and literature. He was elected a member of this Society in the year 1842, and in 1852 succeeded the Earl of Ellesmere as its president. In accepting the nomination tendered to him, he expressed the confident hope "of diffusing among others the deep interest he himself felt in everything that concerns the past history and future progress of a civilization altogether distinct in character and results from our own."

Ill health prevented Lord Ashburton from carrying out, in his official connection with the Society, all that he could have wished; but during the period in which he held the presidentship, he distinguished himself by the interest he took in every measure which was proposed tending to affect the purposes for which the Society was established. Lord Ashburton died on the 23rd of March, in the 65th year of his age.

Colonel Rugby; H. D. Seymour, Esq., M.P., H. B. Sheridan, Esq., M.P.
Non-Resident: J. Catfago, Esq.; J. H. Macalister, Esq.; Rev. W. Parry,
 Rev. Dr. Trumpp, Captain Langmore, Mons. A. Auer.

Deaths.—Resident: Lord Ashburton, B. Botfield, Esq., M.P.; W. Wayte,
 Esq., E. Lawford, Esq., T. C. Robertson, Esq., G. E. Russell, Esq.; N.
 Smith, Esq. *Non-Resident*: Cursatjee Ardaseer, Esq., F. H. Hale, Esq.;
 Lieut.-Col. T. E. Sampson. *Honorary*: Dr. J. R. Ballantyne. *Corresponding*:
 Rev. D. J. Gogerly.

Mr. BOTFIELD was born at Earls Ditton, in Shropshire, on the 5th March, 1807, and died at the age of 56 years. He was educated at Harrow, where his name will be remembered by "the Botfield medal for modern languages," competed for annually. From Harrow he proceeded to Christ Church, Oxford. In 1841 Mr. Botfield's name first appeared as an author in a quarto volume entitled, "Manners and Household Expenses of England in the 13th and 15th centuries, illustrated by original records," which he edited for the Roxburgh Club; and in 1849 he brought out his "Notes on the Cathedral Libraries of England." In 1861 was published "Prefaces to the first editions of the Greek and Roman classics and of the Sacred Scriptures," collected and edited by Beriah Botfield, the result of many years' labour.

Numerous papers have been contributed by him to literary societies. Among others, "An account of the first English Bible;" "Catalogue of the principal book treasures delivered by George IV. to the British Museum;" "Some account of the collegiate library at Tring, in Shropshire," etc. He was a member of the O. T. Fund (in which he took especial interest), the Philobiblon, Maitland, and Spalding Clubs, and was treasurer of the Roxburgh Club. For many years Mr. Botfield represented Ludlow in parliament, and died member for that borough.

Early in life the subject of this obituary notice conceived the keenest admiration for rare and valuable books, and this bibliomania continued to the end of his life. He has formed an extensive and very valuable library at Norton, and is likely perhaps to be remembered longer as an earnest bibliographer and book-collector than as an author or editor of other men's works.

GEORGE EDWARD RUSSELL, the second son of Claud Russell, Esq., for many years Member of Council at Madras, was educated at Eton, and proceeded to India in 1802 as a member of the Madras Civil Service. His first employment after his arrival was as an assistant in the Government Se-

cretariat. At an early period, however, he quitted the capital to serve in the Provinces; and in 1812 he rose to be Collector and Magistrate of Masulipatam. In charge of that extensive and populous district he displayed such administrative ability, as gained for him the high approbation and confidence of the Government. In 1822 he was selected by the then Governor, Sir Thomas Munro, to fill a seat at the Board of Revenue; and two years later he was, by the same distinguished statesman, promoted to be First Member of that Board. In 1832 Mr. Russell officiated for a short time as Resident at the Court of H.H. the Rajah of Mysore.

In December of that year he was deputed as Special Commissioner to enquire into the causes which had led to serious disturbances in portions of the Ganjam and Vizagapatam districts, and to take steps for their suppression. He was authorised to proclaim, if necessary, martial law throughout the country, and to carry into execution whatever other measures he might deem expedient or necessary in order to effect the object of his deputation; and so completely successful was he in the course he thought fit to follow, that by the middle of 1834 tranquillity was restored in every quarter, and a country, which had for some years been the cause of continual anxiety and trouble to the State, was reduced to perfect order and obedience.

In 1834 Mr. Russell was appointed by the Court of Directors to a seat in the Council of Madras.

In 1835 disturbances broke out in Goomsoor, and spread through a large portion of that immense tract of almost unexplored country, which is situated south of the Mahanuddy River and the south-west frontier of Bengal, and also borders on Berar, the Hyderabad country and the northern Sircars of the Presidency of Madras.

Although now, from the position he occupied in the Government, exempt in the usual course of things from all such extraordinary and *outlying* duties, it was at once felt both by the Governor in Council, and by the local Civil and Military authorities, that Mr. Russell was the only person through whom they could hope for success both in at once suppressing

the rebellion, and in ascertaining the causes which had led to it, and guarding against its recurrence.

Although the doing so involved a long and arduous campaign in an almost inaccessible and very unhealthy country, Mr. Russell at once agreed to undertake the duty, and accordingly proceeded, with a considerable military force, on a special mission to the north-eastern frontier. He found on his arrival there the whole country in a state of insurrection; but, in less than two years, he entirely quelled it. In Goomsoor Proper, in Goomsoor above the Ghauts, and amongst the turbulent tributary hill tribes of Khoonds, British authority was equally established and recognised; and the troops were withdrawn without fear or hesitation. It is amongst these latter people that human sacrifices (called *Meriah*) and female infanticide had been previously so long practised, and it was undoubtedly Mr. Russell's operations and reports that led to the measures subsequently taken for putting an end to those odious customs.

The Governor of Madras, in March, 1837, publicly noticed the suppression of these alarming outbreaks through Mr. Russell's exertions; pronounced the most unqualified approbation of his acts; and fairly admitted, that it was to his (Mr. Russell's) judgment, ability, energy, and firmness alone, that the successful result arrived at could be attributed. And, in a Minute in November of the same year, the above encomium was reiterated by the Government in, if possible, still higher terms.

In 1838, after a continuous and most useful service of 35 years, Mr. Russell retired from the service, carrying with him into private life the publicly expressed approval of every class of persons, whether at the Presidency or in the Provinces with which his duties had brought him into communication,—of all in fact with whom he had been, in any way, either officially or socially connected.

Mr. Russell died at his residence in Hyde Park Street, London, on the 20th October, 1863, in his 77th year.

JAMES R. BALIANTYNE, LL.D., was born at Kelso, on the

18th December, 1813. He received the rudiments of education at the Grammar School of that town, and afterwards went to the Edinburgh New Academy and Edinburgh College, where he began the study of oriental languages under Mr. Noble, which he further prosecuted under his uncle Colonel Michael, the Professor of Hindi, and Mr. Johnson, Sanskrit Professor at Haileybury. In those circumstances he acquired such an extended knowledge of eastern tongues as to qualify him to undertake the office of teacher, to which he was appointed in 1839 at the Naval and Military Academy in Edinburgh.

In 1844 he married Miss Robertson, and in the following year, on the recommendation of the late Professor Wilson, he was sent out to India by the Court of Directors of the East India Company as Principal of the College of Benares, at a time when the Indian Government had resolved on the creditable and successful experiment of adding English literature and science to the study of the Sanskrit language and Indian philosophy, which had been till then the exclusive objects of that renowned College. In this post Dr. Ballantyne continued till his return to England in 1861, when he was appointed librarian to the India Office Library in Cannon Row.

During his residence in India Dr. Ballantyne devoted himself especially to the study of the highest branches of Sanskrit ethical and philosophical literature, and he published a number of Sanskrit works on these subjects, together with lectures on the several systems of Indian philosophy, which have become text-books in the Benares College. He also published a series of most interesting papers on Hindu philosophy and logic (signed K) in the Benares Magazine. These papers began in the first number of that magazine, and are continued in almost every subsequent number; they would well repay republication in an independent volume.

His early death, which took place on the 16th February, has been felt as a great loss by students of eastern literature. It is understood that he has left much matter in MS. partly prepared for publication, but unfinished, which, it is hoped, may eventually find a competent editor.

By his second marriage with Miss Monk Mason, Dr. Ballantyne has left several children.

NOTE.—*List of his principal publications:—*

Hindustani Grammar.

— Selections.

Elements of Hindi and Braj Bhakha.

Mahratta Grammar.

The Laghu Kamudi, with an English translation, and notes and references. Mirzapore.

The Mahābhāṣya, or Great Commentary on the aphorisms of Pāṇini. Vol. i., Mirzapore, 1856.

The aphorisms of the following schools of Hindu philosophy, with extracts from the commentaries, in Sanskrit and English:—

Kapila's Aphorisms of the Sāṅkhya, complete;

Patañjali's Aphorisms of the Yoga;

Jaimini's Aphorisms of the Mīmāṃsā;

Bādarāyaṇa's Aphorisms of the Vedānta;

Gautama's Aphorisms of the Nyāya;

Kaṇāda's Aphorisms of the Vaiśeṣika.

Lecture on the Nyāya Philosophy, embracing the text of the Tarka Saṅgraha. 1852.

Lecture on the Sāṅkhya Philosophy, embracing the text of the Tattva Saṁāsa. 1850.

Lecture on the Vedānta Philosophy, embracing the text of the Vedānta-sāra. 1850.

Lectures on the subdivisions of knowledge. Sanskrit and English, 3 parts. 1848, f.

Christianity contrasted with Hindu Philosophy. London, 1859.

The Bhāṣā-parichekheda and Siddhānta-muktāvali. Part 1. Calcutta, 1851.

He edited in the Bibliotheca Indica, an English translation of the Sāhitya Darpaṇa (incomplete), the Sāṅdilya Sūtras and a translation of the Sāṅkhya aphorisms of Kapila (only fasc. 1).

THE REV. DANIEL JOHN GOGERLY was born in London, in August 1792. After passing several years in general studies, and particularly in earnest preparation for the ministry, he proceeded to Ceylon, to take charge of the Wesleyan Mission Press at Colombo. From the time of his arrival, in 1818, he engaged in the study of the vernacular tongues, and was one of the first missionaries who preached extemporaneously in the Singhalese language. While at Negombo, where he was stationed from 1822 to 1834, he began the study of Pali, to the importance of which the

researches of Professors Burnouf and Lassen had at that period begun to draw the attention of oriental scholars. After his removal to Mathura he continued his studies under very favourable circumstances, the priests of that district being regarded as the most learned Pali scholars of the island. He employed native pandits to make copies of all the sacred books, separate parts of which are found in nearly all the temples, and thus succeeded in collecting a complete set of the Pitakattayam, which he has left as a legacy to the Wesleyan Mission.

Though repeatedly urged both by private individuals and public bodies to prepare for the press some standard work in illustration of the southern branch of Buddhism, Mr. Gogerly had not sufficient confidence in himself to undertake a work of such extent. His principal publications consist in essays and translations contributed to the pages of various local periodicals and the Journal of the Ceylon Branch of the Royal Asiatic Society, of which he became in succession secretary, vice-president, and president. These papers are of inestimable value to the comparatively few oriental students who have access to them, as faithful records of ancient Pali treatises, of which neither translations nor printed editions existed before him, and which will long remain our only sources of information on certain chapters of the sacred literature of the Buddhists. Among them may be mentioned the extracts from the Vinaya (Journal Ceylon Branch Royal Asiatic Society, vol. i., part 1; vol. ii., parts 1 and 3; vol. iv., part 1); the translation of the Brahmajālasutta and Subhasutta (*ib.* vol. i., part 2), which invites comparison with Burnouf's translation of part of the former, and the whole of the latter discourse from a Nepal source; the translation of a portion of the Jātaka, or legendary account of the 550 transmigrations of Gotama previous to his becoming Buddha (*ib.* vol. i. part 3); the Pāṭimokkha, on the laws of the priesthood, republished from "The Friend" (vol. iii.), in the last volume of our Journal; and the Dhammapada, or Footsteps of Religion (*ib.* vol. iv.), of which work an edition and two other translations, independent of Mr. Gogerly's, have

since appeared. Besides these, he added a valuable article, entitled "Notes on Buddhism," to a new translation of Ribeyro's History of Ceylon, and rendered considerable assistance to Sir Emerson Tennent in the preparation of his work on Ceylon.

More immediately connected with his missionary labours was the leading part he took in the revision of the Singhalese version of the Holy Scriptures, and the publication of a most carefully written work in Singhalese, called *Kristiyāni Prnjnapti*, on the evidences and doctrines of the Christian Religion. His greatest literary performance, however, is left in MS., a Dictionary of the Pali language; he had begun to compile it while at Mathura, and continued adding to it constantly as his reading became more extensive, so that at the time of his death it contained 15000 words. It is most desirable that this monument of more than 25 years' patient industry may soon meet with that patronage, without which it may possibly remain in MS. yet many a long year.

After Mr. Gogerly had taken up his residence at Colombo, first as chairman of the Wesleyan mission, and subsequently as its general superintendent, his sphere of usefulness became more extensive, his vast experience and knowledge were turned to account by the Government of that island in various branches of its administration, especially in connection with vernacular education, and his suggestions were invariably received with deference by his associates in office. He died at the Wesleyan Mission House, Colpetty, near Colombo, on the 6th of September, 1862.

In the words of the Rev. R. Spence Hardy, "In him oriental literature lost one of its most successful students, and the island of Ceylon one of its greatest benefactors."

THOMAS CAMPBELL ROBERTSON seems to have been born in the year 1789, and was the son of Capt. Robertson, R.N., descended from a good Scottish family. After his education, first at the High School in Edinburgh, and subsequently at the University of Glasgow, Mr. Robertson was appointed in 1805 a writer on the Bengal establishment, but did not reach

Calcutta till Dec. 1806. From the year of his quitting the College, in 1809, he filled various subordinate situations till 1820, when he was appointed Judge and Magistrate of Cawnpore. In April, 1825, he was appointed agent to the Governor-general in Arracan, and in August of that year he was deputed Civil Commissioner in Ava, during the first Burmese war; and it was mainly through his exertions that peace was re-established between the King and the British Government. In 1827, Mr. Robertson came to England, and returned to Bengal in October, 1830. In December of that year he was appointed Commissioner of Revenue and Circuit at Bareilly, and in 1831, agent to the Governor-general on the north-east frontier of Bengal, and Commissioner of Assam. In 1834, he was made Commissioner of Revenue and Circuit in Cuttack, and in 1835, Judge of the Sudder Dewanee Adawlut. In 1836 he was appointed provisional member of Council, and in 1838, second ordinary member. In 1839 or 1840, he was appointed Governor of the North-western Provinces, residing at Agra. This was an anxious period for Mr. Robertson, as the war was raging in Affghanistan, and the new Governor-general had not yet arrived in India. Finally, Mr. Robertson retired from the service, and returned to England in 1843. Mr. Robertson was gifted with high talents and with an energetic character, which particularly qualified him for public business; though on some points connected with our Indian administration his views and opinions materially differed from those of many distinguished contemporaries. He was no great admirer of Utilitarian principles, and regarded with great distrust, and even alarm, those sweeping territorial arrangements which disturbed the long-cherished usages of the village communities, and deprived hundreds of families of their possessions. Such measures as the resumption of the rent-free tenures, or the systematic abolition of the Talookdars, could never find an advocate in Mr. Robertson. Throughout his official career, he was peculiarly tender of the rights and privileges of the natives; and it was, perhaps, the very fact of his knowing the fondness with which they clung to their ancient manners

and customs, and their rooted aversion from all changes, however introduced under the specious designation of improvements, that disposed him rather to be "*laudator temporis acti*" than to look on the march of innovation with complacency. For several years previous to Mr. Robertson's arrival at Cawnpore, there seems to have been a very lax administration in the Civil Court as well as in the collector's kutcherry. The native officers enjoyed unusual licence, so much so, that they had been enabled to gain possession of large tracts of land in various parts of the district. By means of fraudulent sales, on account of pretended arrears of revenue, they contrived to get the Zemindars ousted from their estates, and to have the names of their own friends and relatives substituted in the collector's books. Mr. Robertson's attention was drawn to this circumstance by the Zemindars themselves, who loudly complained, and he would fain have done them justice, but he soon perceived that the mischief was too gigantic to be repaired by ordinary process in a civil Court; and finding himself, moreover, opposed to the Judges of the Court of Appeal, who viewed the matter in a different light, he submitted the case to the notice of Government. A special commission was then appointed for the strict investigation of the claims preferred by the Zemindars, and these much-injured men did eventually obtain redress, though not in proportion to the wrongs they had suffered; and it is scarcely necessary to add, that it was entirely due to Mr. Robertson's strenuous exertions that they got any redress at all. After his return to England, Mr. Robertson published several pamphlets on Indian affairs, as well as a small work on Burmah. But we must refrain from all remarks on the merits of these productions, in order that our brief memoir may not attain an inconvenient size. Mr. Robertson had been all his life fond of books; indeed he never permitted his mind to lie fallow. He taught himself Italian, and was a considerable proficient in that language. It was his constant habit at Cawnpore to read a portion of Tasso, Dante, or Ariosto before breakfast. As a further proof of his ardour for literary pursuits, he subsequently took up the Latin classics, a study which, in all

probability, he had neglected from the time of his quitting school. From his early boyhood he had to contend with the great disadvantage of deafness, which increased as he advanced in life; indeed he has been known to say that he had never heard the birds sing. It is remarkable, however, that this defect, which so frequently gives an air of dullness and apathy to persons afflicted with it, did not prevent Mr. Robertson from taking an interest in what was passing around him. His conversation was varied and animated, for nobody knew better how to apply the resources with which his retentive mind was stored; and this, combined with a naturally courteous and pleasant manner, rendered him a charming member of society. In private life he was of a mild and amiable disposition. To his immediate relatives he was most kind and affectionate, and he received his old and intimate friends with a warmth of greeting which was never assumed, but real, and from the heart. Mr. Robertson was twice married—first, to the eldest daughter of the late Hon. John Elliot, by whom he leaves behind him two sons and a daughter; secondly, to Miss Anderdon, who survives him. He died in July, 1863, at the age of 74, at his residence, 68, Eaton Square.

At the last three anniversaries the Council had to report on the steps they had taken to promote the efficiency of the Society as a literary body, and at the same time to effect a considerable saving in its annual expenditure; for which purpose two schemes had at different times been framed and brought under the notice of Sir Charles Wood. The one was that the library formerly belonging to the East India Company should, under conditions to be specially negotiated, be transferred to the Royal Asiatic Society; and the other, that accommodation should be given to the Society for its Library and the transaction of its current business at the new India Office. The second of these propositions was lately revived by the Council under circumstances that were considered favourable,—viz., the building of a new India Office; and a Committee was appointed to negotiate with the Secretary

of State for India for the purpose of obtaining that accommodation. From private communications, however, which they had with Sir C. Wood on the subject, it appeared that strong objections were entertained by him to the carrying out of that project; and the Committee therefore recommended the Council to make no further move in the matter. In bringing this result to the notice of the Society, the Council desire to place these facts on record as a proof that they have not been unmindful of their duty in devising means tending to promote its welfare.

Among the donations to the Library the Council have to record in the first place the opening volume of Mr. Lane's Arabic Lexicon, the publication of which was mentioned in terms of well-merited praise in last year's report; and secondly, two volumes of Inscriptions published by order of the trustees of the British Museum. The first of these volumes contains facsimiles of 42 Himyaritic Inscriptions, all of which with the exception of five, were obtained in southern Arabia in the course of the year 1862. They are not accompanied with a transcript in Arabic or a translation; but we may hope ere long to receive a full and exhaustive essay on their contents from the pen of a competent scholar, Dr. Osiandar whose preliminary notice of them has been in the hands of orientalists for some time. The new materials thus added to the scanty fragments, on which the decipherers of Himyaritic records have hitherto had to work, will go far to rectify and more fully establish the results of their discoveries. The second volume contains facsimiles of Phœnician Inscriptions discovered by Mr. Nathan Davis during researches made in the years 1856-8, on the site of ancient Carthage, at the expense of her Majesty's Government. They are far more copious than any purely Carthaginian inscriptions before published, and have thus afforded "means for a complete collation and determination of all the Phœnician characters in use along the northern shores of Africa, and set at rest any doubts as to the true value of the ordinary Phœnician letters. In fact, they will form a standard of reference for the determination of any

inscriptions that may hereafter be discovered." Mr. Vaux, the editor, has contributed materially to the utility of these palaeographic memorials by his addition of a transcript in Hebrew characters, a literal translation into English and occasional notes.

The last portion of vol. xx. of the Society's Journal has been in your hands for some time. The articles contained in it, extending as they do over that wide range of oriental research for the prosecution of which this Society was constituted, are fully calculated to prove the usefulness, and sustain the reputation, of our Society.

Arrangements having been made, as was mentioned in last year's report, with the firm of Trübner and Co., of Paternoster Row, for the publication of the Journal, the 20th volume of which is now completed, the Council propose to commence a new series.

A full Index to the first series, the compilation of which has been entrusted to a competent and conscientious scholar, will be issued so soon as the publishers shall have received a sufficient number of subscriptions to guarantee them against loss.

The first half-volume of the new series will be out in the course of July. Of the more important papers about to appear in it, particular interest will be found to attach to an all but exhaustive essay by Mr. J. Muir, D.C.L. and LL.D., on the oldest phase of Hindu Mythology and Cosmogony, as represented in the Vedas; to a chronological paper by Mr. Bosanquet, in which he endeavours to prove that Ussher's Biblical Chronology must be lowered to the extent of exactly 23 years, in order to place it in accordance with the Assyrian canon of Sir H. Rawlinson; and to a dissertation on, and explanation of, certain clay tablets from Nineveh in the British Museum, which in addition to the cuneiform legends, have also upon them inscriptions in the Phœnician character and language. A special interest will be found in the investigation from the circumstance that, the Phœnician character and language being already known, a strong corroboration will be afforded to the genuineness of cuneiform

interpretation by its agreement with the subject of the Phœnician legends connected with them.

Among further contributions, one branch of oriental studies will be represented again which has remained a blank in the pages of our Journal for many years,—the languages and literature of the Malays, Javanese, and other tribes inhabiting the Indian Archipelago. The valuable researches of Dr. Leyden, W. Marsden, W. Robinson, Sir H. Raffles, J. Crawford, and Captain Newbold are too well known to be dwelt upon in detail; but they belong to the past: and though we have in this house an unique collection of Malay and Javanese MSS., and though it is in British territory and in countries under English influence, political as well as commercial, that the best Malay is spoken, we have for the last 30 years been content to resign those advantages to the Dutch, who have not been slow in turning them to account. The contributions to our Journal promised us from Holland may perhaps tend also in this country to revive and challenge literary activity in those long neglected and little trodden paths.

The Council have the pleasure of stating, from information that has lately reached this country from Shanghai, that arrangements have been made to re-establish the North China Branch of the Royal Asiatic Society. That Society was formed at Shanghai in 1857 under the name of the Shanghai Literary Society; and the request of its members to be affiliated to this Society was responded to at the anniversary meeting of the latter in May, 1858. In its Journal, four parts of which were published up to the year 1860, most valuable contributions to our knowledge of Chinese and Japanese antiquities, literature and topography are contained. But, as has been the case with many other literary associations in the East, whose life and existence too exclusively depended on the activity and zeal of one or two of their most eminent promoters, a period of inaction succeeded, owing to the death or temporary absence of its leading members. It is a matter of congratulation that the Shanghai Branch Society is about to resume its useful labours with renewed vigour, and the

Council trust that they may have ere long to record a similar revival on the part of its sister Society of Hong-Kong.

REPORT OF THE ORIENTAL TRANSLATION FUND COMMITTEE.

The Oriental Translation Fund Committee, considering that the state of their funds do not admit of their adding to the number of their publications and thus satisfying the legitimate expectations of their subscribers, have resolved that no further subscriptions shall be called in. With the funds in hand they propose to continue and complete, as speedily as practicable, the translation of Ibn Khallikan by the Baron De Slane, one volume and a half of which remain unpublished. As to the disposal of the Society's stock, the wishes of the actual subscribers will be consulted.

AUDITORS' REPORT.

Your Auditors have to report that they have found the Society's Accounts for the year 1863 correct.

The expenses for the year have been somewhat larger in amount than the receipts; but, as the Society's printing bill is confidently expected to be lower in future,—as the Committee of Agriculture and Commerce have still a balance in their hands so as not to require any further advances, and as the repairs of the Society's house only occur at intervals,—there is every prospect that the receipts of the current year will completely balance the expenditure; so that the necessity will not arise to trench upon the Society's funded reserve, which remains, as before, at the sum of £1,200 Consols.

J. W. BOSANQUET, *Auditor for the Council.*

HENRY LEWIS, }

J. W. REDHOUSE, } *Auditors for the Society.*

LONDON, *May*, 1864.

In conformity with Articles XX. and XXI. of the regulations, the Council have now to propose to the meeting the election of a new President, two Vice-presidents, and five Members of the Council.

The following gentlemen will cease to be Members of the Council :—James Fergusson, Esq. ; Prof. Goldstucker ; J. C. Marshman, Esq. ; P. B. Smollett, Esq., M.P. ; and Dr. J. Forbes Watson. In whose stead it is proposed to substitute the following :—The Right Hon. Holt Mackenzie ; Sir Charles Nicholson ; John Dickinson, Esq. ; W. Spottiswoode, Esq. ; and N. B. E. Baillie, Esq.

The President then rose and addressed the Meeting in brief and forcible terms on the present state and future prospects of the Society. Drawing a comparison between the time when the Asiatic Society, in its interests and associations, was closely connected with the East India Company, and the present moment when, by the dissolution of that body, it has to do its best by itself without support, he laid particular stress on the fact that the Society now must stand and fall by its Journal as the standard of its literary activity and usefulness. India must, as heretofore, continue to occupy a large and perhaps a disproportionate share of the attention of the Society, which might take a pattern from the useful and comprehensive review of the Hindustani press of India, with which Professor G. de Tassy annually opens his course of lectures, and extend it to other subjects and to the rest of the vast continent from which it derives its name. His Lordship remarked that in fact arrangements had already been made for publishing in the Journal summary notices of the progress of the different branches of investigation to which the labours of the Society are directed. Several of these reports, such as that on recent researches on the ethnology of Asia, and those on Asiatic geology and natural history, had been sent in by those members to whom the task of drawing them up had been entrusted ; others, as that on Chinese literature, and on recent Sanskrit publications, were shortly expected, and the rest would soon follow. Mentioning, in conclusion, the

changes that had taken place in the staff of the Society, he said he could not speak too highly of the past services of Mr. Redhouse, to whom, while he held the office of Secretary to the Society, one never applied in vain for information on every subject connected with the languages and literature of the Muhammedan nations; and he trusted that his successor in that office, Dr. Rost, who was more a Hindu than a Muhammedan, would do the Society equally good service in that branch of oriental studies to which he had paid particular attention.

It was then moved by CAPTAIN EASTWICK, seconded by A. RUSSELL, Esq., M.P., and unanimously carried:

"That the Report of the Council, as also that of the Auditors and of the Oriental Translation Fund Committee, be accepted, printed, and circulated; and that the thanks of the meeting be tendered to the President, Director, Vice-Presidents, and other officers of the Society, for the zealous and efficient manner in which they have forwarded the interests of the Society during the past year."

The Ballot for the Officers and Council of the Society for the ensuing year was then proceeded with, and M. P. Edgeworth, Esq., and T. Ogilvy, Esq., having been requested to act as Scrutineers, the result was declared as follows:

President—Sir Edward Colebrooke, Bart., M.P.

Director—Major-Gen. Sir H. C. Rawlinson, K.C.B.

Vice-Presidents—Viscount Strangford and H. T. Prinsep, Esq.

Treasurer—Edward Thomas, Esq.

Honorary Secretary and Librarian—Edwin Norris, Esq.

Secretary—Reinhold Rost, Ph. D.

Council—N. B. E. Baillie, Esq.; J. W. Bosanquet, Esq.; Sir J. F. Davis, Bart., K.C.B.; J. Dickinson, Esq.; M. P. Edgeworth, Esq.; C. C. Graham, Esq.; F. E. Hall, Esq.; Sir F. Halliday, K.C.B.; the Right Hon. Holt Mackenzie; Sir C. Nicholson, Bart.; T. Ogilvy, Esq.; O. de Beauvoir Priaulx, Esq.; E. C. Ravenshaw, Esq.; W. Spottiswoode, Esq.; Major-Gen. Sir A. S. Waugh, C.B.

Sir EDWARD COLEBROOKE, the new President, having been introduced to the meeting by Lord Strangford, briefly returned thanks for his election.

The Chairman then declared the Meeting adjourned till the evening of Monday, the 6th of June.

ABSTRACT OF RECEIPTS AND EXPENDITURE FOR THE YEAR ENDING DECEMBER, 1863.

| RECEIPTS. | | £ | s. | d. | EXPENDITURE. | £ | s. | d. |
|--------------------------------------|-----|-----|-----|-----|---|-----|-----|--------------|
| 149 Resident Members, at 3 guineas | ... | 469 | 7 | 0 | House Rent for the year | ... | ... | 360 0 0 |
| 62 Non-Resident Members, at 1 guinea | ... | 61 | 3 | 0 | Assessed Taxes do. | ... | ... | 19 17 3 |
| 7 Original Members, at 2 guineas | ... | 14 | 4 | 0 | Parochial Rates do. | ... | ... | 37 10 0 |
| Arrears paid up. | ... | 84 | 7 | 0 | Water Rate do. | ... | ... | 5 19 0 |
| Compositions | ... | 31 | 10 | 0 | Fire Insurance do. | ... | ... | 5 18 4 |
| General Sir J. Low | ... | 10 | 10 | 0 | House Expenses, 30l. 8s. 4½; Housekeeper's Wages, 30l. | ... | ... | 346 18 3 |
| Dr. Bhau-Deji | ... | 42 | 0 | 0 | Coal, 8l.; Gas, 3l. 11s. 9d. | ... | ... | 56 8 4½ |
| Donation of India Council | ... | ... | ... | ... | Secretary, 63l. 15s.; Clerk, 55l. 15s.; Porter, 54l. 12s. | ... | ... | 10 11 0 |
| Dividends on Consols | ... | 34 | 15 | 0 | Collector's Poudage | ... | ... | 56 17 10½ |
| Sale of Publications, &c. | ... | 18 | 7 | 0 | Periodicals | ... | ... | 15 17 6 |
| Total Receipts | ... | ... | ... | ... | Home and Foreign Postage | ... | ... | 217 19 6 |
| Balance at Bankers 1st January, 1863 | ... | 247 | 8 | 0 | Sundries | ... | ... | 5 10 0 |
| Ditto in Treasurers' hands | ... | 6 | 4 | 2½ | Advances to Committee of Agriculture & Commerce | ... | ... | 34 1 10 |
| | | | | | Painting and Repairing House | ... | ... | 39 1 2 |
| | | | | | Liabilities of 1863 paid:—Printer | ... | ... | 25 0 0 |
| | | | | | Stationer | ... | ... | 64 5 9 |
| | | | | | Lithographer & Engraver | ... | ... | 137 18 8 |
| | | | | | | ... | ... | 173 17 1 |
| | | | | | | ... | ... | 8 9 0 |
| | | | | | | ... | ... | 16 13 0 |
| | | | | | | ... | ... | 198 13 10 |
| | | | | | | ... | ... | 970 7 7½ |
| | | | | | | ... | ... | 16 0 11 |
| | | | | | | ... | ... | 173 10 9 |
| | | | | | | ... | ... | £1,143 13 4½ |

May 21, 1864.

We have carefully examined the above account with the vouchers, and find it correct.

Amount of Society's Fund,
Three per cent. Consols £1,200.

J. W. BOBANGUET,
HENRY LEWIS,
J. W. REDHOUSE.

ROYAL ASIATIC SOCIETY.

PROCEEDINGS

OF

THE FORTY-SECOND

ANNIVERSARY MEETING OF THE SOCIETY.

Held on the 29th May, 1865,

SIR EDWARD COLEBROOKE, BART., M.P.,

PRESIDENT, IN THE CHAIR.

THE following Report of the Council was read by the Secretary :—

The Council of the Royal Asiatic Society, in submitting their Annual Report, are gratified in being able to state that the accession of new members during the preceding twelve months has been at least commensurate with the losses the Society has sustained in the same period.*

Several of the members of whom the Society has been deprived by death, though not professedly oriental scholars, will be deeply regretted, as having taken a warm interest in its welfare and an active part in its counsels; and the names of FREDERIC FINCHAM and SAMUEL GREGSON, intimately

* *Elected.*—*Resident*—Prof. A. Ameuney, R. H. S. Campbell, Esq.; T. Chenery, Esq.; E. F. Firby, Esq., Rev. J. M. Fuller, W. C. Gainer, Esq., J. W. Laidlay, Esq., A. D. Samson, Esq., R. D. Sassoon, Esq., Mrs. N. Smith, W. D. Vawdrey, Esq. *Non-Resident*—P. H. Egerton, Esq., Baron H. de Schlagintweit, Dr. E. Schlagintweit, Capt. F. W. Stubbs.

Retirements. *Resident*: J. Borradaile, Esq., S. T. Cuthbert, Esq.; J. Landon, Esq., J. A. Mann, Esq., E. R. Power, Esq., H. Pratt, Esq.

Deaths.—*Resident*—Archdeacon Burney, F. Fincham, Esq., M. Gore, Esq.; S. Gregson, Esq., M.P., Sir C. Hopkinson, K.C.B., the Duke of Northumberland, T. Turner, Esq.; J. H. Crawford, Esq. *Non-Resident*—G. C. P. Brune, Esq.; H. S. Froeman, Esq.

associated as they were with its various practical operations, will ever be remembered with gratitude.

The appearance of one other name on the obituary is a subject of sincere regret not only of this Society, but of orientalists generally; it is that of the DUKE OF NORTHUMBERLAND. He was the youngest son of Hugh, the second Duke, and was born on the 15th December, 1792. In his thirteenth year he entered the Navy, and saw much active service in the Mediterranean; but after obtaining the rank of post-captain in 1815, he retired, and devoted himself to travel, chiefly in the Holy Land and Egypt, where his friend, Sir Garduer Wilkinson, enlisted his warmest sympathies in the study of the ancient remains in those countries; and this interest in Egyptian and Biblical antiquities, which was commenced under such auspicious circumstances, never flagged to the end of his life. He was a subscriber to the Oriental Translation Fund from the commencement; and in 1847, the year of his attaining the dukedom, he was elected a member of the Royal Asiatic Society, and until his lamented decease he exhibited much interest in several of its objects. The great Thesaurus of the Arabic language, by Mr. Lane, of which the second part has just been published, is one of the proofs of this interest, as well as of the munificence of the Duke, who bore the whole cost of this work; and, as announced by Mr. Lane in the second part, the same patronage is continued by the Duchess. It is more than probable that but for this patronage, Mr. Lane's great work might never have been undertaken, and this monument of English oriental scholarship would never have seen the light. His Grace died at Alnwick Castle on the 12th March last.

The papers read, and lectures delivered, at the General Meetings have by no means been inferior to those of past years; and no undue preponderance has been given to any one of the various branches of oriental research within the scope of this Society. In several instances, when the subject

of a forthcoming paper has been known to the Council time enough before the meeting, members have been informed of it through the usual channels of literary intelligence; and in some instances gentlemen not members of the Society, but likely to take an especial interest in the papers to be read, have been invited to be present at the meeting, and to take part in any discussion that might follow. Some of the subjects of research to which the Society devotes itself are, in their details, necessarily of a nature to appear uninviting to all but especial students; but even these themes of limited interest have their bearings upon other studies, and discussions upon them frequently elicit much matter of more general interest, and throw sparks of light upon difficult points in relation to them.

Representations having been made from time to time to the Council that the small attendance of members at the General Meetings was owing to the inconvenient hour at which they were held, it seemed to the Council desirable to try whether a change in the hour of meeting from the afternoon to the evening would not prove more generally acceptable. Nearly all the scientific and literary societies of London hold their meetings in the evening, and it seemed reasonable to expect that the same arrangement with regard to hour would suit the convenience of our members also. The result has not, as yet, been answerable to the expectation of the Council, and they are now engaged in endeavouring to ascertain the general wishes of our members by a circular addressed to each of them. The Council will be guided by the answer to this enquiry in determining the hour of meeting during the next session of the Society.

Of the lectures delivered during the past session, there have been several of more general interest; as *e.g.* one by Sir J. F. Davis, "On the rise and progress of Chinese Literature in England during the first half of the present century," one by Mr. C. Engel, "On the Music of the

Assyrians;" one by Mr. Redhouse, "On the Ritualistic Life of the Hanefi Moslems of Turkey;" one by the Rev. A. Tien, "On the Religion of the Druzes;" and one by Dr. Vámbéry, "On the distinctions between the religious practices of the Eastern and Western Muhammedans." How valuable and suggestive of further investigation the discussions called forth by such lectures may become, when handled by those whose opinions on the subject are entitled to all deference, was strongly evidenced in the case of the last-named lecture, which will not easily be forgotten by those who had the pleasure of hearing it in this room.

With regard to papers intended for the Journal,—which, on account of their more strictly scientific character, would, if read in extenso, probably fail to interest any but those scholars whose specialty they touch upon,—it has long been the practice of this Society to read at the General Meetings a summary only, or such select portions as may be supposed to be acceptable to a larger audience. Discussions on such topics by members present will occasionally bring out much valuable collateral information, and tend to confirm or establish important facts; as was recently the case, when such an apparently unpromising subject as the grammar of the Malagasy language elicited a very animated discussion on the question of Malayo-Polynesian comparative philology.

It was remarked by the noble Lord who presided at the last Anniversary Meeting, that "the Society now must stand or fall by its Journal, as the standard of its literary activity and usefulness." The first volume of the new series has just been completed by the publication of the second part, which has to-day been laid upon the table, and is nearly ready for general distribution: the Council have every satisfaction in pointing to it as a palpable proof of the useful operations of this Society. To this second part Mr. Muir has contributed two further Memoirs on the most ancient phase of Hindu Religion. How much his researches in this direction are

thought of by Continental scholars, is evident by the fact that his "Contributions to a knowledge of the Vedic Theogony and Mythology," the first part of which is contained in this volume, has been considered worthy of a translation into German.

More than twenty years ago the late Dr. Alexander Burn presented to the Society three copper-plate inscriptions, being grants of land in an ancient form of Devanagari, which had been found buried near Broach. Facsimiles of these inscriptions were soon afterwards lithographed. Mr. James Prinsep had previously published in the Bengal Journal a copy of one of these inscriptions; but for many years no further decipherment was attempted. They now appear in the Journal, accompanied by a complete transliteration and translation, and an introductory essay on the Châlukya and Gurjara dynasties, from the pen of Professor J. Dowson.

Another obscure chapter of ancient Indian history, viz., the reign of the "Nine Nandas," mentioned in the Buddhist annals of Ceylon, has been elucidated by Mr. Thomas, by an ingenious combination of coin legends with the slender data furnished by classical and eastern historians.

The celebrated passage of the Jyotisha relative to the position of the solstices in the Hindu lunar zodiac, from which Mr. H. T. Colebrooke was the first to derive a date for determining the chronology of the Vedic period, has down to the present day furnished oriental scholars with materials for much controversy. The paper contributed by Professor W. D. Whitney contains a critique on the more important investigations on this subject, on which much additional light has been thrown in a supplementary note by our President, derived in part from his father's copious memoranda on Hindu astronomy.

Dr. Bhân Dâji, of Bombay, has communicated the result of his independent enquiries into the age and authenticity of the works of Âryabhata, Varâhamihira, and other Hindu

astronomers; and by bringing with great ingenuity many new facts from manuscript and inscriptional documents to bear upon the question, he in some instances confirms, but more frequently corrects, the views held by previous writers.

In the year 1852, Sir E. Perry presented to the Bombay Branch Society a memoir "on the conflicting views of European scholars as to the races inhabiting Polynesia and the Indian Archipelago, and as to the languages spoken by them," which was suggested to him by the study of the Preliminary Dissertation prefixed to Mr. Crawford's Grammar and Dictionary of the Malay Language, then recently published. The conclusion at which he arrives, viz., "that the field is still open for enquiry, and that a rich harvest still awaits the patient student and attentive observer amongst the countless tribes of the Indian and Pacific Oceans," has been true even to the present day. For, though orientalists, perhaps without an exception, adopted the views of Marsden and W. von Humboldt, they did not carry their investigations much further. By applying the scientific method of the school of Bopp and Grimm to an enquiry into the structure and affinity of the Western Branch of the Malayo-Polynesian languages, as Dr. H. N. van der Tuuk has so successfully done in his Treatise on the Malagasy Language, the first instalment of which is incorporated in the present volume of the Journal, all controversy on this chapter of comparative linguistics will probably be set at rest for ever.

The printing of the second volume of the Journal has already commenced. Of the papers intended to be comprised in it, we may mention the concluding portion of Mr. Muir's researches on Vedic Religion; a translation, by the Rev. J. Beal, of the Amitâbha Sûtra, from the Chinese, with a dissertation on the age of this work, and on the history of the Buddhist belief in a Western Paradise; an analysis, by Dr. H. N. van der Tuuk, of two Malay MSS., in the Society's possession, containing an account of the wars of

the Kauravas and the Pândavas,—the leading story, in fact, of the Mahābhārata—with remarks on similar works in the Kawi and Javanese languages, and their relation to one another; and, above all, several memoirs by our learned Director, embodying the results of his latest investigations on the astronomy, laws, and chronology of the Assyrians. These memoirs are headed:— 1. Notes on the astronomical knowledge of the early Chaldeans, as recorded on the Nineveh tablets; 2. Restoration of the Assyrian Canon, and enquiry into the true Chronology of the Empire; and 3. Selections from the Nineveh legal tablets, recording deeds of sale and barter, leases of land, etc. The paper on “Bilingual Readings—Cuneiform and Phœnician,” published in the first volume of the Journal, may be considered as an introduction to the third of these memoirs. Now that the second and concluding volume of the Cuneiform Inscriptions, on the preparation of which Sir Henry has been engaged for a number of years, is nearly ready for publication, and that he will then be freed from a task of great labour, though of engrossing interest, the literary world will hail with pleasure the intelligence that the main results of his latest researches, long looked forward to with eager curiosity, will ere long become generally accessible through the pages of our Journal. Indeed, it is impossible at the present day, when the certainty of cuneiform decipherment is admitted on all hands, and the discoveries which continue to be made in it are accepted by all students of Asiatic lore, to overrate the importance of these enquiries. Their bearing on Biblical chronology, on the origin and early history of Greek and Hindu astronomy, and on the history of ancient civilization generally, does not, and cannot admit of a doubt. The Council, therefore, see every reason for sincerely congratulating the members of this Society, that the new series of their Journal will maintain its reputation as the chief depository of a science, of which their Director is the chief expounder.

The Council, desirous of giving their countenance and approbation to any works which appear to be calculated to advance our knowledge in relation to Asia, have the satisfaction of drawing the attention of the members to a Dictionary of the Eastern Turkish Dialects comprised under the name of Jagatai. This work, which will appear under the auspices of this Society, is intended to embody the philological results of Dr. Vámbéry's travels in Central Asia, and thus to fill up a gap long sensibly felt by all students of the Turkish class of languages.

In the year 1850, a resolution was passed at a general meeting, to the effect that no further addition should be made to the two classes of members denominated "Foreign," and "Corresponding," and that men distinguished for superior learning or position, and calculated to make really important contributions to the Society's publications, should thenceforth be enrolled as honorary members. The Council of the Royal Asiatic Society have hitherto been sparing in recommending candidates for this distinction. But having regard to the limited encouragement afforded to oriental studies in England,—consequent upon the altered conditions of the government of India—the Council have now endeavoured to invigorate the cause for which the Society is associated, by seeking out and recognizing contributors towards the knowledge of the East wherever they might be found; though in so doing they may possibly have trenched upon the supposed privileges of the local societies, by electing as honorary members those native authors who have distinguished themselves in any of the three presidencies. From the manner in which the diplomas sent to the persons selected have been received, the Council trust that by this simple measure they are securing enhanced interest and attention to philological, antiquarian, and cognate researches in that portion of Her Majesty's dominions, from whence so many of the subjects for our meetings, and materials for our Journal, have hitherto been supplied.

The Committee of the Oriental Translation Fund have disposed of the stock and copyrights of the Fund to the Wesleyan Methodist Missionary Society, which institution had long appeared among its subscribers, and has undertaken to deliver to the subscribers on the list for 1864, copies of all works which the Fund may hereafter publish, or the Wesleyan Missionary Society itself shall reprint. The stock and copyright of "Tabari" has been presented to the Royal Asiatic Society in acknowledgement of many past services, and arrangements are in progress for continuing and completing the translation of this work. Baron de Slane is engaged upon the continuation of Ibn Khallikan. These two works will probably not be completed for three or four years; and though it is expected that the cost of printing, etc., may somewhat exceed the amount of the funds in hand, together with the accumulated interest, the committee are confident that the excess may be covered by means of private contributions.

AUDITORS' REPORT.

Your Auditors have to report that they have examined the accounts for the year 1864, and found them correct.

The expenses for the year have been about £30 in excess of the income; but as there are no outstanding liabilities of any amount, and as the arrangements with Messrs. Trübner and Co., for the printing of the Journal, relieve the Society of a considerable amount of expense, your Auditors, on making a careful estimate of the income and expenses for the present year, feel confident in reporting that the income of the Society will be more than sufficient to cover all the demands on its resources.

J. W. BOSANQUET, *Auditor for the Council.*

J. FERGUSSON, }
H. LEWIS, } *Auditors for the Society.*

LONDON, May, 1865.

On some of the subjects referred to in this report, Sir EDWARD COLBROOKE, the President, was anxious to make some remarks. He could not allow this opportunity to pass without congratulating our learned Director and his fellow labourers in Cuneiform decipherment on the position which their researches now occupy in public estimation. That their labours should at first have been received with distrust was inevitable. In deciphering the ancient Persian inscriptions, they were dealing with characters within the compass of an alphabet and with a language bearing a close affinity with the ancient Zend and Sanskrit; but in the inscriptions of Assyria, this language, though of the Semitic type, was described by them as only distantly connected with known forms of that family of languages, while from the first they were perplexed by the number of characters, too numerous for an alphabet and too few for a vocabulary. The variety of forms also in which the same proper names appear constituted elements of doubt and difficulty which were not yet entirely overcome. To these might be added a further difficulty pointed out by the late Sir George Lewis in some remarks on hieroglyphic decipherment, and which must apply to all similar studies, viz., the danger of accepting etymology as our guide when the attempt was made to restore the meaning of a lost language by a supposed similarity of sound to a known tongue. The process was certainly hazardous even when the affinity was close, and only to be relied upon when it could be worked out by a slow and patient induction. The confidence which the public now feel in the translations of these monuments which have been presented to them was of course, in the first place, owing to the vast industry which had been brought to bear on the study; but it had been strengthened in proportion as the materials for study and examination had increased, and afforded the means of that patient induction to which Sir G. Lewis referred. He need scarcely remind the Society of the striking coincidence in the interpretations that have been

presented to us by independent labourers in the field, of which a very remarkable instance was given in a former number of our Journal. It was most satisfactory to find the general presumption, as to the correctness of the system of interpretation, strengthened by the discovery of the bilingual tablets, of which some specimens had already been given by Sir H. Rawlinson, and through which the cuneiform inscriptions were explained from a new point of view by comparison with known Phœnician characters. These were matters for congratulation and encouragement, and would enable the meeting to appreciate the importance of the announcement in the report as to the researches in which our Director was now engaged, and of which some instalments might be expected in the next Journal. Great light had already been thrown on the history, antiquities, and manners of the ancient Assyrians. Some insight, too, had been afforded as to their religious belief. We were now promised some information on their scientific knowledge, and especially with regard to astronomy. Public curiosity could not fail to be excited by the announcement of any information on the state of this science in a country which had the reputation of being its birthplace. The fame of the ancient Chaldean astronomers did not rest merely on the traditions of the Greeks or neighbouring nations. In the opinion of Laplace, the observations which have been transmitted to us through the writings of Ptolemy and Geminus bear signs of careful and long-continued observation, and constituted the most curious record of antiquity prior to the rise of the school of Alexandria.

Sir Edward proceeded to advert to some points of especial interest, on which he trusted some light might be thrown, as illustrating the mode or accuracy of their observations, or as serving to determine the epochs of reigns and dynasties. If a conjecture, which was thrown out by our Director at a late meeting of this Society, as to the resemblance of the names of some constellations with the lunar mansions of the Hindus,

should be well founded, some light might be thrown on a controversy which has been as yet barren of positive results, and in which the relative antiquity of the Indian and Chinese Zodiacs have been keenly contested. It was deserving of note, that the latest investigator of this difficult question, Professor Whitney, after an elaborate examination of the several claims to priority, has come to the conclusion that neither Hindu, Arabian, nor Chinese could claim to be the progenitor of the others, but that they probably had a common origin in some fourth and more ancient system.

Now where could we look for traces of this knowledge with more hope than in the ancient lore of the Chaldeans. If Sir H. Rawlinson's present studies throw light on this obscure subject, it might be hoped that both Vedic and Chinese scholars would bow before the superior claim of the ancient cradle of the human race.

Passing to a subject of equal interest though not so generally popular as the Assyrian researches, Sir Edward could not but express his satisfaction at the profound investigation which the ancient literature of India had lately undergone at the hands both of foreign and English scholars.

We had long been familiar, chiefly through the labours of his relative, the founder of this Society, with the speculative philosophy of the Hindus in its mature development. We had also from the same pen our first full account of their most ancient hymns and rituals, containing the substance of their religious opinions at the period of their earliest civilization. Much remained to be done to fill up the sketch which was thus presented to the world. We were now better able to trace the growth of opinions and religious belief from the rude and simple worship of ancient times to that refined and speculative theo-philosophy which acquired so strong a hold over the opinions of this singular race and found its extreme development in the Buddhist creed and ritual. These were studies which must command attention, not merely from our

interest in everything that can throw light on the intellectual progress and singular opinions of the Hindus in ancient times, but on account of the wide influence they have had on the opinions of mankind.

Among the latest contributors to our knowledge of these questions he was glad to refer to the labours of our learned associate, Dr. Muir, whose papers on Vedic Theogony and Mythology are alluded to in the report of the Council. They seemed to Sir Edward to have a special claim on the attention of the Society, on account of the end which Dr. Muir proposed to himself when he first entered upon this field of research, viz., to convey his knowledge of Indian antiquities in a form which, while it might attract and interest the learned, might at the same time be the means of instruction to the natives of the country whose antiquities he was studying. Sir Edward made this remark with greater satisfaction because it served to illustrate an important aim which the Society should always keep in view. Researches in ancient literature and science interest the student and thinker apart from the practical results of their studies, and they will probably be more effectually studied in proportion as they are pursued for knowledge alone; but a Society, however high its aims, will generally command public support in proportion as its aims are practical and even popular. Now the studies here adverted to have a value not merely with the man of science and philosopher but with the statesman and schoolmaster. It was essential for the right government of India that we should know our fellow-subjects not merely as men of business and of the world but in their inner life, and that we should be informed of the history of the opinions, modes of worship, and rituals which had so strong a hold of their conduct, and maintained their manners and creeds amid the shocks and revolutions to which the country had been exposed.

While, therefore, he was anxious to see this Society add

yearly to our knowledge in its most profound and abstract form, he was equally desirous that it should be presented in a shape which would attract and interest a wider circle of students. It had been justly said by our late President, Lord Strangford, that the success and reputation of the Society must depend on its publications; but it might be consistent with this, that more might be done through the medium of our evening meetings; and Sir Edward was sure that, in proportion as they made the results of these researches more generally accessible, they would command public support and approbation.

Sir J. BOWRING moved the adoption of the various reports, and the motion was seconded by the Rev. Dr. HOOLE, and carried unanimously.

The Right Hon. Lord STRANGFORD then rose to call upon the meeting to express their sense of gratitude to the President for the able way in which he had discharged his duties during the past year.

Sir H. C. RAWLINSON seconded. In doing this he asked leave to advert to some points contained in the Report and in the President's address, in which he had himself taken a share. He alluded to some notes drawn up but not yet ready for publication, relating to the astronomy of the Chaldees, which he had collected from the examination of a large number of fragmentary documents now in the British Museum. He said that among much which was as yet hardly intelligible, a good deal had been brought to light which was new and important, and calculated to lead us back to the very birth of astronomy, shewing points of connection with the Chinese and Indian systems. The equinoctial star of the Chaldees named on the inscription A-gan might be connected with the Hindu Aswin (γ Arietis), and *kin* and *tul*, for the Virgin and Balance, were sufficiently like the Sanskrit *Kanyā* and *Tola*. But the Lunar Zodiac had hitherto been undiscovered in the Chaldee system, although there were signs of its existence. He would at the

same time observe that the whole doctrine was rather astrology than astronomy, being connected with the observance of lucky and unlucky days; and being, in fact, the original source from which all astrologers have drawn, from the times of the Greeks and Romans down to the Zadkiel of the present day.

Sir EDWARD COLEBROOKE returned thanks.

M. P. Edgeworth, Esq., and F. Hall, Esq., having been requested to act as scrutineers, the meeting proceeded to ballot for the Officers and Council of the Society for the ensuing year. At the close of the ballot, it was announced that the Officers of the past year were re-elected, and that the following members were elected to form the Council for the year:—

The Rev. W. Arthur, M.A.; Neil B. E. Baillie, Esq.; John Dickinson, Esq.; M. E. Grant Duff, Esq., M.P.; Edward B. Eastwick, Esq.; Fitzedward Hall, Esq., D.C.L.; the Right Hon. Holt Mackenzie; John C. Marshman, Esq.; Sir Charles Nicholson, Bart.; Thos. Ogilvy, Esq.; Osmond de Beauvoir Priaulx, Esq.; Edward C. Ravenshaw, Esq.; Arthur Russell, Esq., M.P.; William Spottiswoode, Esq.; General Sir Andrew Scott Waugh, C.B.

ABSTRACT OF RECEIPTS AND EXPENDITURE FOR THE YEAR ENDING DECEMBER, 1894.

| 1864. | | RECEIPTS. | | EXPENDITURE. | |
|--|---------|-----------|---|--------------|------------|
| | £ s. d. | £ s. d. | | £ s. d. | £ s. d. |
| 1442 Resident Members, at 8 guineas | .. | 447 6 0 | House Rent for the year | ... | 280 0 0 |
| 62 Non-Resident Members, at 1 guinea | .. | 63 2 0 | Assessed Taxes do. | ... | 19 17 2 |
| 6 Original Members, at 2 guineas | .. | 12 12 0 | Parcharial Rates do. | ... | 99 11 8 |
| Arsenals paid up | .. | 18 18 0 | Water Rate do. | ... | 5 19 0 |
| Composition :—Colonel Kemball | .. | 10 10 0 | Fire Insurance do. | ... | 5 12 6 |
| Donation of India Council | ... | ... | House Expenses, 201, &c., 1d.; Housekeeper's Wages, &c. | ... | 251 0 4 |
| Dividends on Consols, £1200 | ... | 35 0 6 | Coal, 121; Gas &c., as per agreement | ... | 56 4 1 |
| Issue of Publications :—Tribner | ... | 116 5 0 | Secretary, 2001; House Porter, 541, 12s. | ... | 17 0 0 |
| Quaritch | ... | 12 19 0 | Out Postage | ... | 6 10 0 |
| House ... | ... | 0 3 0 | Sinclair and In-Postage | ... | 26 9 8 |
| Legacy by the late Mr. Boilsfield | ... | 31 10 0 | Messrs. Tribner & Co., for publishing Journal. | ... | 100 15 0 |
| Donations towards Printing Expenses :— | ... | ... | Bookbinding | ... | 15 4 6 |
| By Mr. Beauquet, £10, by Mr. Muir, £5 | ... | 15 0 0 | Repairs and Bookshelves | ... | 15 8 7 |
| | ... | ... | Liabilities of 1863 paid :—Printer Stationer | ... | 164 7 0 |
| | ... | 44 10 0 | | ... | 157 3 1 |
| | ... | 973 5 5 | | ... | 164 9 7 |
| Balance at Bankers' 1st January, 1864 | ... | 165 9 10 | | ... | 1007 13 0 |
| Ditto in Treasurer's hands, &c. | ... | 18 0 11 | Balance at Bankers' 31st December, 1864 | ... | 129 2 4 |
| | ... | 178 16 9 | Ditto in Treasurer's hands | ... | 159 2 6 |
| | ... | 1146 16 9 | | ... | 21146 16 2 |

We have carefully examined the above account with the vouchers, and it correct.

JAS. PERGUSON,
HENRY LEWIS,
J. W. BOBANGUET.

| | | |
|---------------------------|-----|--------|
| Amount of Society's Fund, | ... | £1,900 |
| Three per cent. Consols | ... | ... |

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1864.

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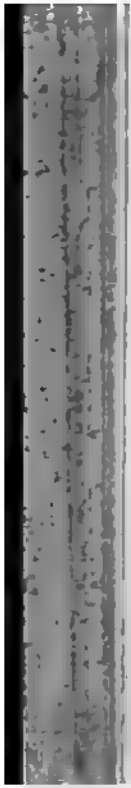
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